THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

D.T.E. 06-__

BAY STATE GAS COMPANY

BAY STATE GAS COMPANY'S ANNUAL PERFORMANCE BASE REGULATION RATE ADJUSTMENT INCLUDING REQUEST FOR EXOGENOUS FACTOR TREATMENT

September 15, 2006

BAY STATE GAS COMPANY PERFORMANCE -BASED REGULATION ("PBR") PLAN FILING Effective November 1, 2006

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PART A

Section 1

Patricia M. French Legal Counsel



300 Friberg Parkway Westborough, Massachusetts 01581 (508) 836-7394 (508) 836-7039 (facsimile) pfrench@nisource.com

September 15, 2006

VIA HAND DELIVERY

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station
Boston, MA 02110

Re: Bay State Gas Company, D.T.E. 06-___

Dear Ms. Cottrell:

Enclosed for filing, pursuant to the Order of the Department of Telecommunications and Energy ("Department") in D.T.E. 05-27 (2005) is Bay State Gas Company's ("Bay State's") first annual Performance Based Regulation ("PBR") rate adjustment. This filing is also made pursuant to the terms of Bay State's approved PBR Plan tariff, M.D.T.E. No. 68.

In support of this filing, please find the following materials.

- 1. Exhibit BSG/JAF-1, the Summary Report prepared by and under the supervision of Joseph A. Ferro, Bay State's Manager, Regulatory Policy, that introduces the PBR rate adjustment (Part A, Schedule 2) and describes its key elements, along with supporting tariffs and documentation (Part A, Schedules 3 through 9);
- 2. Petition of Bay State for exogenous factor treatment of materially declining average use per customer (Part B, Tab 1);
- 3. Exhibit BSG/LRK-1, the Prefiled Direct Testimony of Dr. Lawrence R. Kaufmann, Partner at Pacific Economics Group, regarding Bay State's request for exogenous factor treatment of materially declining average use per customer, along with a supporting schedule, Exh. LRK-1 (Part B Tab 2); and
- 4. Exhibit BSG/DPY-1, the Prefiled Direct Testimony of Daniel P. Yardley, Principal of Yardley & Associates, along with supporting schedules, Exh. DPY-1 and Exh. DPY-2 (Part B, Tab 3).

Cottrell Letter
Bay State Gas Company
Performance Based Regulation Adjustment and Request for Exogenous Factor Treatment
September 15, 2006
Page 2

A copy of this letter is provided.	Please date	stamp	and return	ı it for	our	files.	As
usual, thank you for your attention and c	onsideration	n.					

Very truly yours,

Patricia M. French

Encs.

Patricia M. French Legal Counsel



300 Friberg Parkway Westborough, Massachusetts 01581 (508) 836-7394 (508) 836-7039 (facsimile) pfrench@nisource.com

September 15, 2006

VIA HAND DELIVERY

Kevin Brannelly, Director Rates and Revenue Requirements Department of Telecommunications and Energy One South Station Boston, MA 02110

Re: Bay State Gas Company, D.T.E. 06-___

Dear Mr. Brannelly:

Enclosed for filing, pursuant to the Order of the Department of Telecommunications and Energy ("Department") in D.T.E. 05-27 (2005) is Bay State Gas Company's ("Bay State's") first annual Performance Based Regulation ("PBR") rate adjustment. This filing is also made pursuant to the terms of Bay State's approved PBR Plan tariff, M.D.T.E. No. 68.

In support of this filing, please find the following materials.

- 1. Exhibit BSG/JAF-1, the Summary Report prepared by and under the supervision of Joseph A. Ferro, Bay State's Manager, Regulatory Policy, that introduces the PBR rate adjustment (Part A, Schedule 2) and describes its key elements, along with supporting tariffs and documentation (Part A, Schedules 3 through 9);
- 2. Petition of Bay State for exogenous factor treatment of materially declining average use per customer (Part B, Tab 1);
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- 4. Exhibit BSG/DPY-1, the Prefiled Direct Testimony of Daniel P. Yardley, Principal of Yardley & Associates, along with supporting schedules, Exh. DPY-1 and Exh. DPY-2 (Part B, Tab 3).

Brannelly Letter
Bay State Gas Company
Performance Based Regulation Adjustment and Request for Exogenous Factor Treatment
September 15, 2006
Page 2

A copy of this letter is provided. Please date stamp and return it for our files. As usual, thank you for your attention and consideration.

Very truly yours,

Patricia M. French

Encs.

cc: Mary L. Cottrell, Secretary

Section 2

Bay State Gas Company
D.T.E. 06-_
Exhibit BSG/JAF-1
Section 2
Page 1 of 3

Performance-Based Regulation Plan Annual Filing Applicable to Firm Sales Service Rate Classes and Transportation Service Rate Classes Effective November 1, 2006

Prepared By: Joseph A. Ferro Manager, Regulatory Policy Bay State Gas Company

Bay State Gas Company ("Bay State" or "the Company") presents its first annual Performance Based Regulation ("PBR") rate adjustment, pursuant to <u>Bay State Gas Company</u>, D.T.E. 05-27 (2005) ("D.T.E. 05-27"), and according to its PBR Plan tariff, M.D.T.E. No. 68. Section 1 of this filing provides the transmittal letter under which this filing is being made.

Adjustment to 2005 Normalized Revenue

Consistent with the Department's directives in D.T.E 05-27, the proposed rates are designed to increase the Company's 2005 normalized revenue by \$8,612,671. A bill-impact analysis, comparing existing rates to the proposed rates, which include both base rates and the cost of gas adjustment (CGA) rates, is included in Section 7 [and 7(a)] of this filing. The existing rates are those that were approved by the Department at D.T.E 05-27, while the CGA rates represent the past Peak Period 2005-06 and current Off-peak Period 2006 rates.

The Company's proposed revenue increase of \$8,612,671 was determined by using the Department-approved price-path formula with an inflation rate of 3.14 percent as measured by the GDP-PI, less the productivity offset of 0.51 percent plus a Z-Factor of 3.68 percent for a net increase of 6.31 percent (Section 4, Page 1). The Company has also provided a set of schedules, marked with an (a), that exclude the Z-Factor of 3.68 percent for the Department's convenience and ease of review. The exclusion of the Z-Factor results in a net increase of 2.63% (see Section 4(a), Page 1) and a base revenue increase of \$3,586,673.

The inflation rate in the price-path formula was calculated by comparing the average of the four most recent quarterly measures of the GDP-PI, as of the second quarter of 2006, to the average of the four most recent quarterly measures as of the second quarter of 2005. The GDP-PI inflation rate calculations are shown in Section 4, Page 2.

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Exhibit BSG/JAF-1
Section 2
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Productivity Offset

The productivity offset of 0.51% is the level approved by the Department in D.T.E 05-27. The various components of the offset as approved by the Department are presented in Section 4, Page 3.

Z-Factor

The Z-Factor of 3.68% reflects the exogenous treatment of the base revenue impact of the continuous and material decline in the natural gas consumption based on the average use per customer ("AUPC") of the Company's residential customers, and which is beyond its control. The Company's support for the base revenue impact of this material declining use per customer and exogenous treatment of this impact through the Z-Factor has been included in Part B of this filing, consisting of Bay State's Petition for such recovery and the direct testimony and schedules of Lawrence R. Kaufmann, Partner at Pacific Economics Group, and Daniel P. Yardley, Principal of Yardley & Associates.

Earnings Sharing

Bay State has not included an Earnings Sharing factor for 2005 because, in accordance with its tariff, this component of Bay State's PBR plan is not effective until the calendar year 2006. Please see Section 4, Page 5 for a more detailed explanation of the inapplicability of Earnings Sharings in Bay State's first year, and the format to be used in computing the Earning Sharing factor for subsequent years, consistent with the format that the Department has established for other LDC annual PBR rate adjustments filings,.

Weather Adjustment

Bay State calculated its base rate revenue by reducing actual 2005 margins by \$5,956,553 to account for colder than normal weather experienced during the calendar year 2005. Please see Section 3, Line 3 and Section 6, Page 2 for a by month, by rate schedule presentation of the weather adjustment. The weather adjustment was calculated using normal weather as defined and approved in D.T.E 05-27.

Calculation of Proposed Rates

Section 4 [and 4(a)] presents the calculation of the proposed rates. This section shows the actual 2005 billing determinants for each class and adjusted for weather. The normalized billing determinants are multiplied by the currently effective rates to arrive at normalized base revenue for calendar year 2005. The new base revenue is calculated by applying the proposed rates to the normalized billing determinants for each rate class verifying that the proposed rates produce the proposed PBR revenue requirement. This Section also details the proposed rate increase for each rate element and rate class. The

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proposed rates were designed in accordance with D.T.E 05-27. An explanation of each column is included at the beginning of Section 5 [and 5(a)] and is titled "Revenue Adjustment Support."

Bill Impact Analysis

Section 7 [and 7(a)] presents the bill impact analysis, Section 8 [and 8(a)] sets forth the proposed tariff sheets with a red lined copy, and Section 9, at this time, is a placeholder for a proposed bill insert that will be provided once the Company has worked with the Department and prepared an appropriate bill insert.

Section 3

Bay State Gas Company Performance-Based Regulation Plan Filing Development of Price Cap Revenue

Ln. <u>No.</u>	<u>Item</u> (1)	Amount (2)
1	2005 Base Revenue	
2	(2005 Actual Volume @ D.T.E 05-27 Rates)	\$ 142,301,324
3	Weather Adjustment	\$ (5,808,915)
4	Normalized Base Revenue (Ln. 2 plus Ln. 3)	\$ 136,492,409
5	(See Section 5, Page 2, Line 46, Column 5)	
6	PBR Volume - Therms (See Section 5, Page 2, Line 46, Column 3)	462,545,777

Section 4

Bay State Gas Company Performance-Based Regulation Plan Filing PBR Compliance Form

Ln. <u>No.</u>	<u>ltem</u> (1)	Reference (2)	Therms (3)	Revenue (4)
1	Base_Revenue (2005)	Section 3	488,303,057	\$ 142,301,324
2	Adjustments		(25,757,280)	\$ (5,808,915)
3	Adjusted Base_Revenue		462,545,777	\$ 136,492,409
4	PBR CAP Determination GDPPI _{T-1} - Inflation	Sect.4, Pg. 2		3.14%
5	X - Productivity	Sect.4, Pg. 3		-0.51%
6	Z _{REV} - Exogenous	Sect.4, Pg. 4		3.68%
7	ESM _{REV} - Earnings Sharing Mechanism	Sect.4, Pg. 5		0.00%
8	PBR_CAP _T (Lns. 4 thru 7)			<u>6.31%</u>
9	Proposed Revenue (Col.3, Ln. 3 * 1 plus Col.	3, Ln. 8)	462,545,777	\$ 145,105,080
10	Revenue Increase/(Decrease) (Col. 3, Ln. 9	less Col. 3, Ln. 3)		\$ 8,612,671

Bay State Gas Company Performance-Based Regulation Plan Filing Gross Domestic Product - Price Index

Ln. <u>No.</u>	Quarter (1)	GDP-PI <u>2005-2006</u> (2)	GDP-PI 2004-2005 (3)	GDPPI _{T-1} (4)
1	Quarter 3	113.139	109.744	
2	Quarter 4	114.048	110.610	
3	Quarter 1	114.967	111.558	
4	Quarter 2	115.916	112.229	
5	Total	458.070	444.141	
6	Annual Average & Percentage Change	<u>114.518</u>	111.035	<u>3.14%</u>

Source:

U.S. Department of Commerce, Bureau of Economic Analysis National Economic Accounts National Income and Product Accounts Table Table 1.1.4 Price Indexes for Gross Domestic Product Date: last revised 8/30/2006

http://www.bea.gov/bea/dn/nipaweb/TableView.asp

Bay State Gas Company Performance-Based Regulation Plan Filing X Factor - Productivity

Ln. <u>No.</u>	ltem (1)	<u>X Factor</u> (2)
1	Input Price Trend Differential	0.30%
2	Productivity Trend Differential	-0.19%
3	Consumer Dividend	0.40%
4	X Factor (Lines 1 thru 3)	<u>0.51</u> %

Note:

Levels as set by the Department in Bay State's General Rate Case at D.T.E 05-27. (Page 394 of the Oder). These levels will not change until Bay State's next general rate case.

Bay State Gas Company Performance-Based Regulation Plan Filing Z Factor - Exogenous Events

Ln. <u>No.</u>	Event (1)	Z Factor (2)
1	Base_Revenue (2005)	136,492,409
2	Z _{REV} - Exogenous (\$)	5,022,860
3	Z _{REV} - Exogenous (%) - Ln. 2/Ln. 1	<u>3.68%</u>

Bay State Gas Company Performance-Based Regulation Plan Filing Earnings Sharing Mechanism

Ln. <u>No.</u>		Reference (2)	2005 <u>Actual</u> (3)		Upper <u>Bandwidth</u> (4)		Lower <u>Bandwidth</u> (5)
1	BSG Net Utility Income	An.Ret. Pg. R2, Ln. 18	\$ 0				
2	Total Average Utility Common Equity	An.Ret. Pg. R2, Ln. 29	\$ 0				
3	Return on Equity	An.Ret. Pg. R2, Ln. 30	100.00%				
4	D.T.E 05-27 Threshold				14%		6%
5	% Over/(Under) Bandwidth				86.00%		0.00%
6	Amount Over/(Under) Bandwidth (Ln. 5	* Ln. 2)		\$	-		-
	50% to Shareholder 50% to Customers			\$ \$	-	\$ \$	-
9	Earnings Sharing Revenue (Ln. 8 * 1.68	316)		\$	-	\$	-
10	Base Revenue	Section 3, Col. 2, Ln. 4		\$	136,492,409	\$	136,492,409
11	ESM % (Ln. 9/Ln. 10)*-1				<u>0.00%</u>		<u>0.00%</u>

Note:

The Earnings Sharing component of Bay State's PBR Plan does not commence until the calendar year 2006 per Tariff Provision 6.7. Furthermore, since the approved base rates from Bay State's general rate case at D.T.E 05-027 were not effective until December 1, 2005, the Earnings Sharing component is not appropriate. The purpose of this page is illustrative only.

Conversion factor of 1.6816 (Ln. 9) as shown on Exh. BSG/JES-1, Schedule JES-3 [Revision 1] of D.T.E 05-27.

Section 4 (a)

Bay State Gas Company Performance-Based Regulation Plan Filing Without Exogenous Factor PBR Compliance Form

Ln. <u>No.</u>	<u>ltem</u> (1)	Reference (2)	Therms (3)		Revenue (4)
1	Base_Revenue (2005)	Section 3	488,303,057	\$	142,301,324
2	Adjustments		(25,757,280)	\$	(5,808,915)
3	Adjusted Base_Revenue		462,545,777	<u>\$</u>	136,492,409
	PBR CAP Determination				
4	GDPPI _{T-1} - Inflation	Sect.4(a), Pg. 2			3.14%
5	X - Productivity	Sect.4(a), Pg. 3			-0.51%
6	Z _{REV} - Exogenous	Sect.4(a), Pg. 4			0.00%
7	ESM _{REV} - Earnings Sharing Mechanism	Sect.4(a), Pg. 5			0.00%
8	PBR_CAP _T (Lns. 4 thru 7)				<u>2.63%</u>
9	Proposed Revenue (Col.3, Ln. 3 * 1 plus Co	ol. 3, Ln. 8)	462,545,777	\$	140,082,160
10	Revenue Increase/(Decrease) (Col. 3, Ln. 9	9 less Col. 3, Ln. 3)		\$	3,589,750

Bay State Gas Company Performance-Based Regulation Plan Filing Without Exogenous Factor Gross Domestic Product - Price Index

Ln. <u>No.</u>	<u>Quarter</u> (1)	GDP-PI <u>2005-2006</u> (2)	GDP-PI 2004-2005 (3)	GDPPI _{T-1} (4)
1	Quarter 3	113.139	109.744	
2	Quarter 4	114.048	110.610	
3	Quarter 1	114.967	111.558	
4	Quarter 2	115.916	112.229	
5	Total	458.070	444.141	
6	Annual Average & Percentage Change	<u>114.518</u>	<u>111.035</u>	<u>3.14%</u>

Source:

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http://www.bea.gov/bea/dn/nipaweb/TableView.asp

Bay State Gas Company Performance-Based Regulation Plan Filing Without Exogenous Factor X Factor - Productivity

Ln. <u>No.</u>	<u>Item</u> (1)	X Factor (2)
1	Input Price Trend Differential	0.30%
2	Productivity Trend Differential	-0.19%
3	Consumer Dividend	0.40%
4	X Factor (Lines 1 thru 3)	<u>0.51</u> %

Note:

Levels as set by the Department in Bay State's General Rate Case at D.T.E 05-27. (Page 394 of the Oder). These levels will not change until Bay State's next general rate case.

Bay State Gas Company Performance-Based Regulation Plan Filing Without Exogenous Factor Z Factor - Exogenous Events

Ln. <u>No.</u>	Event (1)	Z Factor (2)
1	Base_Revenue (2005)	136,492,409
2	Z _{REV} - Exogenous (\$)	
3	Z _{REV} - Exogenous (%) - Ln. 2/Ln. 1	0.00%

Bay State Gas Company Performance-Based Regulation Plan Filing Without Exogenous Factor Earnings Sharing Mechanism

Ln. <u>No</u>		Reference (2)	2005 <u>Actual</u> (3)	ļ	Upper <u>Bandwidth</u> (4)		Lower <u>Bandwidth</u> (5)
1	BSG Net Utility Income	An.Ret. Pg. R2, Ln. 18	\$ 0				
2	Total Average Utility Common Equity	An.Ret. Pg. R2, Ln. 29	\$ 0				
3	Return on Equity	An.Ret. Pg. R2, Ln. 30	100.00%				
4	D.T.E 05-27 Threshold				14%		6%
5	% Over/(Under) Bandwidth				86.00%		0.00%
6	Amount Over/(Under) Bandwidth (Ln. 5	* Ln. 2)		\$	-		-
7 8	50% to Shareholder 50% to Customers			\$ \$	<u>-</u>	\$ \$	<u>.</u>
9	Earnings Sharing Revenue (Ln. 8 * 1.68	316)		\$	-	\$	-
10	Base Revenue	Section 3, Col. 2, Ln. 4		\$	136,492,409	\$	136,492,409
11	ESM % (Ln. 9/Ln. 10)*-1				0.00%		<u>0.00%</u>

Note:

The Earnings Sharing component of Bay State's PBR Plan does not commence until the calendar year 2006 per Tariff Provision 6.7. Furthermore, since the approved base rates from Bay State's general rate case at D.T.E 05-027 were not effective until December 1, 2005, the Earnings Sharing component is not appropriate. The purpose of this page is illustrative only.

Conversion factor of 1.6816 (Ln. 9) as shown on Exh. BSG/JES-1, Schedule JES-3 [Revision 1] of D.T.E 05-27.

Section 5

Bay State Gas Company Performance-Based Regulation Plan Filing PBR Increase Calculation & Rate Design

Rail Residential Non-Heating State Sta		Revenues Proposed	Proposed Rates	Revenue Incr @ 6.31%	Revenue	Base Rate	'05 Adjusted Deter. Therms	. Weather Adjusted Therms	5 Actual Deter. Therms	'0 Rate Schedule
Residential Non-Heating 1	(9)	(8) (5*(1+col 9))		(6)		(4)		(2)	(1)	
Customer Charge 378,597 378,597 379,597 \$ 10,00 \$ 3,785,700 \$ 10,68 \$ 4,044	• • • • • • • • • • • • • • • • • • • •	(, , , , , , , , , , , , , , , , , , ,	()		(- /		` ,			R&T 1
Customer Charge										
Peak Volumes	.173 6.829	\$ 4,044,173	10.68	\$	\$ 3,785,970	10.00	378 597 \$		378 597	
R&T 2								_		
R&T 2 Residential Non-Heating Customer Charge 21,921 21,921 3 6.00 5 131,526 5 6.41 5 140 14										
R&T 2 Residential Non-Heating Customer Charge 21,921						0.2004	2,213,030 φ	•	2,213,036	
Residential Non-Heating	0.317	\$ 3,046,074	<u> </u>	φ 3,040,011	D 0,313,339	=				Total
Residential Non-Heating										
Customer Charge										
Peak Volumes										
Total	496 6.82%	\$ 140,496	6.41	\$	\$ 131,526	6.00	21,921 \$		21,921	Customer Charge
R&T 3 Residential Heating Customer Charge 2,441,600 4,450,641 4,600 4,441,600 5 10,00 5 24,416,000 5 10,68 5 26,081 26,081 5 26,081 26,081 26,081 26,081 26,081 26,081	576 5.44%	\$ 57,576	0.1698	\$	\$ 54,605	0.1610	339,163 \$	-	339,163	Peak Volumes
R&T 3 Residential Heating Customer Charge 2,441,600 2,441,600 \$ 10.00 \$ 24,416,000 \$ 10.68 \$ 26,081 \$	033 5.449	\$ 24,033	0.1698	\$	\$ 22.793	0.1610	141.572 \$		141.572	Off-Peak Volumes
R&T 3 Residential Heating Customer Charge 2,441,600							, +		, =	
Residential Heating		ψ <u> </u>	=	Ψ 222,101	200,02.	=				. Otal
Residential Heating Customer Charge 2,441,600 169,850,399 100,00 24,416,000 100,00 100										DOT 2
Customer Charge										
Peak Volumes				_						
Off-Peak Volumes 1,000 1										
R&T 4 Residential Non-Heating Customer Charge 212,788 212,789 212,788 212,789 21	730 6.09%						169,850,399 \$	(11,524,735)	181,375,134	Peak Volumes
R&T 4 Residential Non-Heating Customer Charge 212,788 212,788 212,788 \$ 5.70 \$ 1,212,892 \$ 6.09 \$ 1,295 Peak Volumes 16,233,636 (1,020,245) 15,213,391 \$ 0.1547 \$ 2,353,512 \$ 0.1641 \$ 2,497 Off-Peak Volumes 4,465,968 (545,341) 3,920,627 \$ 0.1547 \$ 606,521 \$ 0.1641 \$ 643 Total Customer Charge 118 118 \$ 2.18 \$ 257 \$ 2.31 \$ Peak Volumes 1,110	143 6.09%	\$ 11,662,143	0.2879	\$	\$ 10,992,689	0.2714	40,503,643 \$	(3,458,929)	43,962,572	Off-Peak Volumes
Residential Non-Heating Customer Charge 212,788 212,788 212,788 5.70 \$ 1,212,892 \$ 6.09 \$ 1,295 \$ Peak Volumes 16,233,636 (1,020,245) 15,213,391 \$ 0.1547 \$ 2,353,512 \$ 0.1641 \$ 2,497 \$ Off-Peak Volumes 4,465,968 (545,341) 3,920,627 \$ 0.1547 \$ 606,521 \$ 0.1641 \$ 643 \$ 1014	044 6.319	\$ 86,648,044	-	\$ 86,649,121	\$ 81,506,087	-				Total
Residential Non-Heating	_		_			-				
Residential Non-Heating										P&T /
Customer Charge 212,788 212,788 5.70 \$ 1,212,892 \$ 6.09 \$ 1,295 Peak Volumes 16,233,636 (1,020,245) 15,213,391 \$ 0.1547 \$ 2,353,512 \$ 0.1641 \$ 2,497 Off-Peak Volumes 4,465,968 (545,341) 3,920,627 \$ 0.1547 \$ 606,521 \$ 0.1641 \$ 2,497 Outdoor Light Rate L Customer Charge 118 \$ 2.18 \$ 257 \$ 2.31										
Peak Volumes	044	A 4005.044	0.00		1 010 000	5.70	040 700 0		040 700	
Off-Peak Volumes Total 4,465,968 (545,341) 3,920,627 \$ 0.1547 \$ 606,521 \$ 0.1641 \$ 643 \$ 4,436 \$ 0.1641 \$ 643 \$ 4,436 \$ 0.1641 \$ 643 \$ 4,436 \$ 0.1641 \$ 643 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 4,436 \$ 2,231 \$ \$ \$ 2,231 \$										
Total										
Outdoor Light Rate L Customer Charge 118 118 \$ 2.18 \$ 257 \$ 2.31 </td <td><u>519</u> 6.10%</td> <td>\$ 643,519</td> <td>0.1641 _</td> <td>\$</td> <td>\$ 606,521</td> <td>0.1547</td> <td>3,920,627 \$</td> <td>(545,341)</td> <td>4,465,968</td> <td>Off-Peak Volumes</td>	<u>519</u> 6.10%	\$ 643,519	0.1641 _	\$	\$ 606,521	0.1547	3,920,627 \$	(545,341)	4,465,968	Off-Peak Volumes
Customer Charge 118 118 2.18 257 \$ 2.31 <td>189 6.31%</td> <td>\$ 4,436,189</td> <td>-</td> <td>\$ 4,436,236</td> <td>\$ 4,172,924</td> <td>_</td> <td></td> <td></td> <td></td> <td>Total</td>	189 6.31%	\$ 4,436,189	-	\$ 4,436,236	\$ 4,172,924	_				Total
Customer Charge 118 118 2.18 257 \$ 2.31 \$ Peak Volumes I,110 1,110 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 2 2 2 2 3 3 4 3 3 4 3 4 4 3 3 4 4 3 4 3 4 4 3 4 4 3 4 4 4 4 4 4 4 4 4			=			=				
Customer Charge Peak Volumes 118 1,110 118 1,110 2.18 1,110 257 257 \$ 2.31 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Outdoor Light Rate I</td></t<>										Outdoor Light Rate I
Peak Volumes Off-Peak Volumes Total 1,110 1,078	273 6.31%	\$ 273	2 31 (•	\$ 257	2 18	118 \$		118	
Off-Peak Volumes 1,078	275 0.517	Ψ 2/3	2.51	Ψ	251	2.10				
Total G & T 40 C&I Low Annual/High Winter Customer Charge 202,923 202,923 16.00 3,246,768 \$ 17.09 3,468 Peak Volumes 22,075,370 (1,426,340) 20,649,030 \$ 0.2868 5,922,142 \$ 0.3042 \$ 6,281 Off-Peak Volumes 3,647,910 (483,370) 3,164,540 \$ 0.2868 907,590 \$ 0.3042 \$ 962 Total G & T 50 C&I Low Annual/Low Winter Customer Charge 41,731 41,731 \$ 16.00 \$ 667,696 \$ 17.09 \$ 713 Peak Volumes 3,763,780 3,763,780 \$ 0.2699 \$ 1,015,844 \$ 0.2864 \$ 1,077 Off-Peak Volumes 2,142,390 2,142,390 \$ 0.2699 \$ 578,231 \$ 0.2864 \$ 613		œ.	,	•	•		, -		, -	
G & T 40 C&I Low Annual/High Winter Customer Charge 202,923 202,923 \$ 16.00 \$ 3,246,768 \$ 17.09 \$ 3,466 Peak Volumes 22,075,370 (1,426,340) 20,649,030 \$ 0.2868 \$ 5,922,142 \$ 0.3042 \$ 6,281 Off-Peak Volumes 3,647,910 (483,370) 3,164,540 \$ 0.2868 \$ 907,590 \$ 0.3042 \$ 962 Total							1,078 \$	-	1,078	
Cel Low Annual/High Winter Customer Charge 202,923 202,923 16.00 \$ 3,246,768 \$ 17.09 \$ 3,468 Peak Volumes 22,075,370 (1,426,340) 20,649,030 \$ 0.2868 \$ 5,922,142 \$ 0.3042 \$ 6,281 Off-Peak Volumes 3,647,910 (483,370) 3,164,540 \$ 0.2868 \$ 907,590 \$ 0.3042 \$ 962 Total Total \$ 10,076,500 \$ 10,712,327 \$ 10,712 \$ 10,712 G & T 50 C81 Low Annual/Low Winter Customer Charge 41,731 \$ 16.00 \$ 667,696 \$ 17.09 \$ 713 Peak Volumes 3,763,780 3,763,780 0.2699 \$ 1,015,844 \$ 0.2864 \$ 1,077 Off-Peak Volumes 2,142,390 2,142,390 \$ 0.2699 \$ 578,231 \$ 0.2864 \$ 613	273 6.31%	\$ 273		\$ 273	\$ 257	=				Iotai
CBI Low Annual/High Winter Customer Charge 202,923 202,923 16.00 \$ 3,246,768 \$ 17.09 \$ 3,468 Peak Volumes 22,075,370 (1,426,340) 20,649,030 \$ 0.2868 \$ 5,922,142 \$ 0.3042 \$ 6,281 Off-Peak Volumes 3,647,910 (483,370) 3,164,540 \$ 0.2868 \$ 907,590 \$ 0.3042 \$ 962 Total Total \$ 10,076,500 \$ 10,712,327 \$ 10,712 \$ 10,712 G & T 50 Cast Low Annual/Low Winter Customer Charge 41,731 \$ 16.00 \$ 667,696 \$ 17.09 \$ 713 Peak Volumes 3,763,780 3,763,780 0.2699 \$ 1,015,844 \$ 0.2864 \$ 1,077 Off-Peak Volumes 2,142,390 2,142,390 \$ 0.2699 \$ 578,231 \$ 0.2864 \$ 613										
Customer Charge Peak Volumes 202,923 202,923 16.00 \$ 3,246,768 \$ 17.09 \$ 3,468 Peak Volumes 22,075,370 (1,426,340) 20,649,030 \$ 0.2868 \$ 5,922,142 \$ 0.3042 \$ 6,281 Off-Peak Volumes Total 3,647,910 (483,370) 3,164,540 \$ 0.2868 \$ 907,590 \$ 0.3042 \$ 0.3042 \$ 0.2868 \$ 962 Total \$ 10,076,500 \$ 10,712,327										G & T 40
Customer Charge 202,923 202,923 16.00 \$ 3,246,768 \$ 17.09 \$ 3,468 Peak Volumes 22,075,370 (1,426,340) 20,649,030 \$ 0.2868 \$ 5,922,142 \$ 0.3042 \$ 6,281 Off-Peak Volumes 3,647,910 (483,370) 3,164,540 \$ 0.2868 \$ 907,590 \$ 0.3042 \$ 0.3042 \$ 0.2868 \$ 962 Total \$ 10,076,500 \$ 10,712,327 \$ 10,712 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>iter</u></td> <td>C&I Low Annual/High Wir</td>									<u>iter</u>	C&I Low Annual/High Wir
Peak Volumes 22,075,370 (1,426,340) 20,649,030 \$ 0.2868 \$ 5,922,142 \$ 0.3042 \$ 6,281 Off-Peak Volumes 3,647,910 (483,370) 3,164,540 \$ 0.2868 \$ 907,590 \$ 0.3042 \$ 962 Total 10,076,500 \$ 10,712,327 \$ 10,712 \$ 962 \$ 10,712 \$ 962 \$ 10,712 \$ 962 \$ 962 \$ 10,712 \$ 962 \$ 962 \$ 10,712 \$ 962 \$ <td< td=""><td>198 6.829</td><td>\$ 3,468,198</td><td>17.09</td><td>\$</td><td>\$ 3,246,768</td><td>16.00</td><td>202,923 \$</td><td></td><td></td><td></td></td<>	198 6.829	\$ 3,468,198	17.09	\$	\$ 3,246,768	16.00	202,923 \$			
Off-Peak Volumes Total 3,647,910 (483,370) 3,164,540 \$ 0.2868 \$ 907,590 \$ 0.3042 \$ 962 G & T 50 C8I Low Annual/Low Winter Customer Charge Peak Volumes 41,731 \$ 16.00 \$ 667,696 \$ 17.09 \$ 713 Off-Peak Volumes 3,763,780 3,763,780 \$ 0.2699 \$ 1,015,844 \$ 0.2864 \$ 1,077 Off-Peak Volumes 2,142,390 2,142,390 \$ 0.2699 \$ 578,231 \$ 0.2864 \$ 613								(1.426.340)		•
Total \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\										
G & T 50 <u>C&I Low Annual/Low Winter</u> Customer Charge 41,731 41,731 \$ 16.00 \$ 667,696 \$ 17.09 \$ 713 Peak Volumes 3,763,780 3,763,780 \$ 0.2699 \$ 1,015,844 \$ 0.2864 \$ 1,077 Off-Peak Volumes 2,142,390 2,142,390 \$ 0.2699 \$ 578,231 \$ 0.2864 \$ 613						0.2000	э, гон, эно ф	(+05,570)	5,047,510	
C&I Low Annual/Low Winter Customer Charge 41,731 41,731 \$ 16.00 \$ 667,696 \$ 17.09 \$ 713 Peak Volumes 3,763,780 3,763,780 0.2699 \$ 1,015,844 \$ 0.2864 \$ 1,077 Off-Peak Volumes 2,142,390 2,142,390 \$ 0.2699 \$ 578,231 \$ 0.2864 \$ 613	0.317	ψ 10,112,320	<u> -</u>	ψ 10,112,321	ψ 10,010,000	=				ıvıaı
C&I Low Annual/Low Winter Customer Charge 41,731 41,731 \$ 16.00 \$ 667,696 \$ 17.09 \$ 713 Peak Volumes 3,763,780 3,763,780 0.2699 \$ 1,015,844 \$ 0.2864 \$ 1,077 Off-Peak Volumes 2,142,390 2,142,390 \$ 0.2699 \$ 578,231 \$ 0.2864 \$ 613										
Customer Charge 41,731 41,731 16.00 667,696 \$ 17.09 713 Peak Volumes 3,763,780 3,763,780 0.2699 1,015,844 \$ 0.2864 \$ 1,077 Off-Peak Volumes 2,142,390 2,142,390 578,231 \$ 0.2864 \$ 613										
Peak Volumes 3,763,780 3,763,780 0.2699 1,015,844 \$ 0.2864 \$ 1,077 Off-Peak Volumes 2,142,390 2,142,390 \$ 0.2699 \$ 578,231 \$ 0.2864 \$ 613										
Off-Peak Volumes 2,142,390 2,142,390 \$ 0.2699 \$ 578,231 \$ 0.2864 \$ 613	233 6.829	\$ 713,233	17.09	\$	\$ 667,696	16.00	41,731 \$		41,731	Customer Charge
Off-Peak Volumes 2,142,390 2,142,390 \$ 0.2699 \$ 578,231 \$ 0.2864 \$ 613	753 6.109	\$ 1,077,753	0.2864	\$	\$ 1,015,844	0.2699	3,763,780 \$		3,763,780	Peak Volumes
Ψ =j=0·j··· Ψ =j···j·ου Ψ 2,το··							, -, Ψ		, :=,=30	
	0.517	Ψ <u>2,707,700</u>	=	Ψ 2,.0.,.00	,,///	=				
										0.0 T.44
G & T 41										
C&I Med Annual/High Winter										
	696 6.829						53,270 \$		53,270	Customer Charge
Peak Volumes 44,512,500 (2,867,480) 41,645,020 \$ 0.1588 \$ 6,613,229 \$ 0.1684 \$ 7,012	508 6.07%	\$ 7,012,508	0.1684	\$	\$ 6,613,229	0.1588	41,645,020 \$	(2,867,480)	44,512,500	Peak Volumes
Off-Peak Volumes 7,746,380 (939,970) 6,806,410 \$ 0.1006 \$ 684,725 \$ 0.1067 \$ 726	288 6.07%	\$ 726,288	0.1067	\$	\$ 684,725	0.1006	6,806,410 \$	(939,970)	7,746,380	Off-Peak Volumes
							-,, , +	(/)	, -,,	

Bay State Gas Company Performance-Based Regulation Plan Filing PBR Increase Calculation & Rate Design

	PBR Increase Calculation & Rate Design												
ne lo.	Rate Schedule	'05 Actual Deter. Therms	Weather Adjusted Therms	'05 Adjusted Deter. Therms		Base Rate	Revenue	6.	ue Incr @ .31%	Proposed Rates		venues oposed	Revenue Percent Increase
		(1)	(2)	(3) (1+2)		(4)	(5) (3*4)		(6)	(7) (8/3)	(5*((8) I+col 9))	(9)
	G & T 51 C&I Med Annual/Low \	Vintor											
3	Customer Charge	23,795		23.795	\$	65.00	\$ 1,546,675		9	69.43	\$	1,652,158	6.82%
4	Peak Volumes	15,177,460		-,	\$		\$ 2,261,442		9			2,397,979	6.04%
5	Off-Peak Volumes	9,240,180		9,240,180		0.0693			9			679,021	6.04%
;	Total	-,,		-,,	•		\$ 4,448,461	\$ 4	4,729,159		\$	4,729,158	6.31%
,						=			_				
. (3 & T 42												
. (C&I High Annual/High	Winter											
) -	Customer Charge	9,010		9,010	\$	213.00	\$ 1,919,130		\$	227.53	\$	2,050,015	6.82%
	Peak Volumes	33,454,670	(2,269,730)	31,184,940	\$	0.1485	\$ 4,630,964		\$		\$	4,914,140	6.12%
2	Off-Peak Volumes	6,897,000	(768,880)	6,128,120	\$	0.0644	\$ 394,651		9	0.0683	\$	418,804	6.12%
3	Total					_	\$ 6,944,745	\$ 7	7,382,958		\$	7,382,959	6.31%
4						=							
5 (3 & T 52												
6 (C&I High Annual/Low \	<u>Vinter</u>											
7	Customer Charge	4,661		4,661	\$	213.00	\$ 992,793		9	227.53	\$	1,060,501	6.82%
3	Peak Volumes	17,253,660		17,253,660	\$	0.1380	\$ 2,381,005		9	0.1465	\$	2,527,199	6.14%
9	Off-Peak Volumes	11,158,000		11,158,000	\$	0.0539	\$ 601,416		9	0.0572	\$	638,343	6.14%
)	Total					' -	\$ 3,975,214	\$ 4	4,226,050		\$	4,226,043	6.31%
1						=							
2 (G & T 43												
3 (C&I Extra High Annual	High Winter											
4	Customer Charge	760		760	\$	781.00	\$ 593,560		\$	834.26	\$	634,041	6.82%
5	Peak Volumes	5,647,420	(338,020)	5,309,400	\$	0.0418	\$ 221,933		\$	0.0443	\$	235,049	5.91%
6	Off-Peak Volumes	1,238,480	(114,240)		\$		\$ 17,988		\$		\$	19,051	5.91%
7	Peak Demand	264,625		264,625	\$	1.78	\$ 471,033		\$	1.8852	\$	498,871	5.91%
3	Off-Peak Demand	86,038	-	86,038	\$		\$ 47,321			0.5825	\$	50,117	5.91%
9	Total					_	\$ 1,351,834	\$ 1	1,437,135		\$	1,437,129	6.31%
)						_							
1 (G & T 53												
	C&I Extra High Annual	Low Winter											
3	Customer Charge	972		972		781.00			\$			810,905	6.82%
1	Peak Volumes	29,336,860	-		\$		\$ 1,226,281		\$			1,302,678	6.23%
5	Off-Peak Volumes	22,564,900	-	, ,	\$	0.0160			\$			383,531	6.23%
3	Peak Demand	1,369,633		, ,	\$		\$ 2,437,947		\$			2,589,713	6.23%
7	Off-Peak Demand	1,160,455	-	1,160,455	\$		\$ 638,250			0.5843		678,054	6.23%
3	Total					=	\$ 5,422,648	\$ 5	5,764,817		\$	5,764,881	6.31%
9													
	Special Contracts				_		_				_		
1	Customer Charge	-		-			\$ -	_			\$		
2	All therms	235,218	-	235,218	\$		\$ 49,200		52,305 \$	0.44		52,305	6.31%
3	Total					=	\$ 49,200	\$	52,305		\$	52,305	
4													
5	T	400 000 0	(05.757.653)	100 5 15 555		=	A 400 400 100		- 105 000			F 400 000	00:01
	Total All	488,303,057	(25,757,280)	462,545,777			\$ 136,492,409	\$ 145	5,105,080		\$ 14	5,102,069	6.31%
6						=		•					
	(Line 46 is the sum					=	<u> </u>	\$ 8	3,612,671		\$	8,609,660	

Section 5 (a)

Bay State Gas Company Performance-Based Regulation Plan Filing Without Exogenous Factor PBR Increase Calculation & Rate Design

Line <u>No.</u>	Rate Schedule	'05 Actual Deter	. Weather Adjusted Therms	'05 Adjusted Deter. Therms		Base Rate		Revenue	Revenue Incr @ 2.63%	Proposed Rates	Revenues Proposed	Revenue Percent Increase
		(1)	(2)	(3) (1+2)		(4)		(5) (3*4)	(6)	(7) (8/3)	(8) (5*(1+col 9))	(9)
	R&T 1			()				(0 4)		(0/0)	(0 (110010))	
	Residential Non-Heating											
1	Customer Charge	378,597		378,597		10.00		3,785,970	9		. , ,	3.14%
2	Peak Volumes	3,475,008	=	3,475,008		0.2684	\$	932,692			\$ 945,470	1.37%
3	Off-Peak Volumes	2,215,638	-	2,215,638	\$	0.2684		594,677		0.2721	\$ 602,824	1.37%
4	Total						\$	5,313,339	\$ 5,453,080		\$ 5,453,143	2.63%
5												
6	R&T 2											
7	Residential Non-Heating	<u>ng</u>										
8	Customer Charge	21,921		21,921	\$	6.00	\$	131,526		6.19	\$ 135,656	3.14%
9	Peak Volumes	339,163	-	339,163	\$	0.1610	\$	54,605	(0.1638	\$ 55,566	1.76%
10	Off-Peak Volumes	141,572	-	141,572	\$	0.1610	\$	22,793		0.1638	\$ 23,194	1.76%
11	Total						\$	208,924	\$ 214,419		\$ 214,416	2.63%
12												
13	R&T 3											
14	Residential Heating											
15	Customer Charge	2,441,600		2,441,600	\$	10.00	\$	24,416,000	Ç	10.31	\$ 25,182,662	3.14%
16	Peak Volumes	181,375,134	(11,524,735)	169,850,399	\$	0.2714	\$	46,097,398	9	0.2779	\$ 47,208,346	2.41%
17	Off-Peak Volumes	43,962,572		40,503,643	\$	0.2714	\$	10,992,689		0.2779	\$ 11,257,613	2.41%
18	Total		, , ,				\$	81,506,087	\$ 83,649,697		\$ 83,648,621	2.63%
19								, ,	· · · · · ·			
20	R&T 4											
21	Residential Non-Heatin	na										
22	Customer Charge	212,788		212,788	\$	5.70	\$	1,212,892	5	5.88	\$ 1,250,976	3.14%
23	Peak Volumes	16,233,636	(1,020,245)	15,213,391	\$	0.1547	\$	2,353,512			\$ 2,410,450	2.42%
24	Off-Peak Volumes	4,465,968	(545,341)	3,920,627		0.1547	\$	606,521			. , ,	2.42%
25	Total	., .00,000	(0.0,011)	0,020,021	٣	00	\$	4,172,924		000	\$ 4,282,625	2.63%
26							<u> </u>	.,2,02	ψ :,202,012		Ψ 1,202,020	2.0070
27	Outdoor Light Rate L											
28	Customer Charge	118		118	Ф	2.18	Φ.	257	9	2.24	\$ 264	2.63%
29	Peak Volumes	1,110		1,110	Ψ	2.10	Ψ	231	`	2.24	Ψ 204	2.0370
30	Off-Peak Volumes	1,078	_	1,078	Ф	_	\$	_	9		\$ -	
31	Total	1,070	_	1,070	Ψ	_	\$	257		, -	\$ 264	2.63%
32	Total						Ψ	231	Ψ 204		Ψ 20 4	2.0370
33	C 9 T 40											
34	G & T 40	Aliman .										
35	C&I Low Annual/High Customer Charge	202,923		202,923	Ф	16.00	¢	3,246,768		16.50	¢ 2240747	3.14%
36	•		(4.406.040)	20.649.030		0.2868	\$		9			2.39%
37	Peak Volumes Off-Peak Volumes	22,075,370	(1,426,340)	3,164,540			\$	5,922,142 907,590	3			2.39%
38	Total	3,647,910	(483,370)	3,164,540	Ф	0.2868	\$			0.2936		2.39%
	Total						<u> </u>	10,076,500	\$ 10,341,512		\$ 10,341,512	2.03%
39												
40	G & T 50	• • •										
41	C&I Low Annual/Low \				•		•					
42	Customer Charge	41,731		41,731		16.00		667,696	9			3.14%
43	Peak Volumes	3,763,780		3,763,780		0.2699	\$	1,015,844	9		. , ,	2.42%
44	Off-Peak Volumes	2,142,390		2,142,390	\$	0.2699		578,231	9	0.2764	\$ 592,224	2.42%
45	Total						\$	2,261,771	\$ 2,321,256		\$ 2,321,256	2.63%
46												
	G & T 41											
48	C&I Med Annual/High											
49	Customer Charge	53,270		53,270		65.00		3,462,550			\$ 3,571,274	3.14%
50	Peak Volumes	44,512,500	(2,867,480)	41,645,020	\$	0.1588	\$	6,613,229	\$	0.1625	\$ 6,769,141	2.39%

Bay State Gas Company Performance-Based Regulation Plan Filing Without Exogenous Factor PBR Increase Calculation & Rate Design

ne		'05 Actual Deter		'05 Adjusted		Base			Rev	enue Incr @	Proposed		Revenues	Revenue Percent
<u>o.</u> _	Rate Schedule	Therms	Adjusted Therms			Rate		Revenue		2.63%	Rates		Proposed	Increase
		(1)	(2)	(3)		(4)		(5)		(6)	(7)		(8)	(9)
51	Off-Peak Volumes	7,746,380	(939,970)	(1+2) 6,806,410	Ф	0.1006	\$	(3*4) 684,725		\$	(8/3) 0.1030		(5*(1+col 9)) 701,090	2.3
2	Total	7,740,300	(939,910)	0,000,410	Ψ	0.1000	\$	10,760,504	\$	11,043,505	0.1030	\$	11,041,505	2.0
_	Total						Ψ	10,700,304	Ψ	11,043,303		Ψ	11,041,303	2.0
(G & T 51													
2 (C&I Med Annual/Low \	<u>Vinter</u>												
; -	Customer Charge	23,795		23,795	\$	65.00	\$	1,546,675		\$	67.04	\$	1,595,241	3.
	Peak Volumes	15,177,460)	15,177,460	\$	0.1490	\$	2,261,442		\$	0.1525	\$	2,314,758	2.
	Off-Peak Volumes	9,240,180)	9,240,180	\$	0.0693	\$	640,344		\$	0.0709	\$	655,457	2.
;	Total						\$	4,448,461	\$	4,565,456		\$	4,565,456	2.
. (3 & T 42													
(C&I High Annual/High	Winter												
) -	Customer Charge	9,010		9,010	\$	213.00	\$	1,919,130		\$	219.69	\$	1,979,391	3.
ı	Peak Volumes	33,454,670		31,184,940	\$	0.1485	\$	4,630,964		\$			4,743,720	2.
2	Off-Peak Volumes	6,897,000		6,128,120	\$	0.0644		394,651		\$				2.
}	Total	-,,	(,,	-, -,	•		\$	6,944,745	\$	7,127,391		\$	7,127,391	2.
ļ								<u> </u>						
	3 & T 52													
	C&I High Annual/Low \	Vinter												
7	Customer Charge	4,661		4.661	\$	213.00	\$	992,793		\$	219.69	\$	1,023,967	3
3	Peak Volumes	17,253,660		17,253,660	\$	0.1380		2,381,005		\$			2,439,578	2
	Off-Peak Volumes	11,158,000		11,158,000		0.0539	\$	601,416		\$			616,211	2
,	Total	11,130,000		11,130,000	Ψ	0.0559	\$	3,975,214	\$	4,079,762	0.0332	\$	4,079,756	2
ı	Total						Ψ	3,373,214	Ψ	4,073,702		Ψ	4,073,730	۷.
	3 & T 43													
		/Lliab \A/intor												
ა <u>(</u> 4	C&I Extra High Annual Customer Charge	760		760	\$	781.00	Φ	593,560		\$	805.52	¢.	612,198	3.
+ 5	Peak Volumes	5,647,420		5,309,400	э \$	0.0418		221,933		\$			226,882	2.
5			, , ,	, ,	Ф \$					\$				2.
	Off-Peak Volumes	1,238,480	, , ,	1,124,240		0.0160		17,988		\$			18,389	
7	Peak Demand	264,625		264,625	\$	1.78	\$	471,033		\$			481,537	2.
3	Off-Peak Demand	86,038	-	86,038	\$	0.5500		47,321	Φ.		0.5623		48,379	2.
	Total						\$	1,351,834	\$	1,387,387		\$	1,387,385	2.
١.														
	3 & T 53													
	C&I Extra High Annual				•		_			_		_		
3	Customer Charge	972		972		781.00		759,132		\$			782,969	3
	Peak Volumes	29,336,860		29,336,860	\$	0.0418		1,226,281		\$			1,257,551	2
,	Off-Peak Volumes	22,564,900		22,564,900	\$	0.0160		361,038		\$			370,245	2
	Peak Demand	1,369,633		1,369,633	\$	1.78		2,437,947		\$			2,499,996	2
	Off-Peak Demand	1,160,455	-	1,160,455	\$	0.5500	\$	638,250		\$	0.5640		654,497	2
	Total						\$	5,422,648	\$	5,565,264		\$	5,565,258	2
)														
-	Special Contracts													
	Customer Charge	-		-	\$	-	\$	-				\$	-	
2	All therms	235,218	-	235,218	\$	-	\$	49,200		50,494 \$	0.42		50,494	2
3	Total						\$	49,200	\$	50,494		\$	50,494	
4														
5	Total All	400 000 057	(0E 7E7 000)	460 545 777			_	100 100 100	Φ.	140,000,400		•	140.070.000	_
	Total All	488,303,057	(25,757,280)	462,545,777			\$	136,492,409	\$	140,082,160		\$	140,079,082	2

Section 6

Bay State Gas Company Performance-Based Regulation Plan Filing

Normal Billing Volumes (Therms)

	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	Oct	Nov	<u>Dec</u>	<u>Total</u>
RESIDENTIAL													
R&T 1	703,424.0	635,975.0	544,586.0	457,929.0	368,388.0	344,141.0	377,902.0	334,214.0	356,267.0	434,726.0	510,674.0	622,420.0	5,690,646.0
R&T 2	50,856.0	53,585.0	78,084.0	38,951.0	32,302.0	20,589.0	25,708.0	18,716.0	19,632.0	24,625.0	48,287.0	69,400.0	480,735.0
R&T 3	38,834,970.0	33,045,441.0	27,109,778.0	16,163,355.0	7,652,226.0	4,721,604.0	4,910,438.0	4,341,782.0	5,780,589.0	13,097,004.0	21,646,297.0	33,050,558.0	210,354,042.0
R&T 4	3,140,120.0	2,919,429.0	2,630,072.0	1,731,765.0	1,084,764.0	509,926.0	547,032.0	351,748.0	439,201.0	987,956.0	1,810,933.0	2,981,072.0	19,134,018.0
Outdoor Lighting	265.0	197.0	197.0	<u>157.0</u>	146.0	145.0	190.0	190.0	<u>194.0</u>	213.0	201.0	93.0	2,188.0
Total Residential	42,729,635.0	36,654,627.0	30,362,717.0	18,392,157.0	9,137,826.0	5,596,405.0	5,861,270.0	5,046,650.0	6,595,883.0	14,544,524.0	24,016,392.0	36,723,543.0	235,661,629.0
Commercial/Industrial													
G&T 40	4,824,460.0	4,078,890.0	3,301,590.0	1,829,750.0	694,810.0	267,760.0	247,830.0	200,890.0	389,900.0	1,363,350.0	2,527,300.0	4,087,040.0	23,813,570.0
G&T 50	765,560.0	693,780.0	619,060.0	473,190.0	357,750.0	307,170.0	351,230.0	351,760.0	339,430.0	435,050.0	524,290.0	687,900.0	5,906,170.0
G&T 41	9,699,340.0	8,211,280.0	6,662,580.0	3,727,090.0	1,462,440.0	606,950.0	632,140.0	460,440.0	849,800.0	2,794,640.0	5,116,410.0	8,228,320.0	48,451,430.0
G&T 51	3,004,060.0	2,748,240.0	2,482,710.0	1,977,620.0	1,587,010.0	1,437,900.0	1,541,450.0	1,385,160.0	1,475,310.0	1,813,350.0	2,214,320.0	2,750,510.0	24,417,640.0
G&T 42	7,173,430.0	6,107,500.0	5,006,130.0	2,902,680.0	1,271,990.0	641,380.0	655,290.0	526,730.0	817,840.0	2,214,890.0	3,879,470.0	6,115,730.0	37,313,060.0
G&T 52	3,371,280.0	3,064,790.0	2,835,820.0	2,317,050.0	1,915,170.0	1,758,980.0	1,787,850.0	1,761,550.0	1,785,930.0	2,148,520.0	2,553,950.0	3,110,770.0	28,411,660.0
G&T 43	1,216,980.0	1,035,550.0	850,840.0	498,440.0	226,480.0	120,010.0	132,020.0	122,460.0	136,000.0	387,270.0	666,660.0	1,040,930.0	6,433,640.0
G&T 53	5,765,960.0	5,415,710.0	5,052,610.0	4,368,210.0	3,843,370.0	3,646,800.0	3,844,280.0	3,560,900.0	3,706,210.0	3,963,340.0	4,100,200.0	4,634,170.0	51,901,760.0
Total G & T	35,821,070.0	31,355,740.0	26,811,340.0	18,094,030.0	11,359,020.0	8,786,950.0	9,192,090.0	8,369,890.0	9,500,420.0	15,120,410.0	21,582,600.0	30,655,370.0	226,648,930.0
Special Contract	19,491.0	213,655.0	0.0	2,072.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	235,218.0
Total	78,570,196.0	68,224,022.0	57,174,057.0	36,488,259.0	20,496,846.0	14,383,355.0	15,053,360.0	13,416,540.0	16,096,303.0	29,664,934.0	45,598,992.0	67,378,913.0	462,545,777.0

Bay State Gas Company Performance-Based Regulation Plan Filing

Weather Adjustment Volumes (Therms)

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	Nov	<u>Dec</u>	<u>Total</u>
RESIDENTIAL													
R&T 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R&T 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R&T 3	(4,071,321.0)	(653,184.0)	(5,397,954.0)	1,306,933.0	(4,211,322.0)	(166,345.0)	0.0	0.0	565,197.0	353,541.0	813,391.0	(3,522,600.0)	(14,983,664.0)
R&T 4	(329,199.0)	(57,706.0)	(523,686.0)	140,027.0	(596,988.0)	(17,965.0)	0.0	0.0	42,943.0	26,669.0	68,049.0	(317,730.0)	(1,565,586.0)
Outdoor Lighting	0.0	<u>0.0</u>	0.0	0.0	<u>0.0</u>	<u>0.0</u>	0.0	0.0	<u>0.0</u>	0.0	0.0	0.0	<u>0.0</u>
Total Residential	(4,400,520.0)	(710,890.0)	(5,921,640.0)	1,446,960.0	(4,808,310.0)	(184,310.0)	0.0	0.0	608,140.0	380,210.0	881,440.0	(3,840,330.0)	(16,549,250.0)
Commercial/Industrial													
G&T 40	(511,040.0)	(63,660.0)	(720,270.0)	187,000.0	(587,030.0)	(20,500.0)	0.0	0.0	70,360.0	53,800.0	133,550.0	(451,920.0)	(1,909,710.0)
G&T 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G&T 41	(1,029,970.0)	(131,670.0)	(1,437,460.0)	376,980.0	(1,167,700.0)	(34,500.0)	0.0	0.0	150,690.0	111,540.0	261,410.0	(906,770.0)	(3,807,450.0)
G&T 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G&T 42	(797,230.0)	(137,370.0)	(1,052,030.0)	257,680.0	(859,350.0)	(99,140.0)	0.0	0.0	119,040.0	70,570.0	149,730.0	(690,510.0)	(3,038,610.0)
G&T 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G&T 43	(123,100.0)	(11,990.0)	(166,910.0)	46,750.0	(139,560.0)	(7,760.0)	0.0	0.0	20,670.0	12,410.0	22,680.0	(105,450.0)	(452,260.0)
G&T 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total G & T	(2,461,340.0)	(344,690.0)	(3,376,670.0)	868,410.0	(2,753,640.0)	(161,900.0)	0.0	0.0	360,760.0	248,320.0	567,370.0	(2,154,650.0)	(9,208,030.0)
Special Contract	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	(6,861,860.0)	(1,055,580.0)	(9,298,310.0)	2,315,370.0	(7,561,950.0)	(346,210.0)	0.0	0.0	968,900.0	628,530.0	1,448,810.0	(5,994,980.0)	(25,757,280.0)

Bay State Gas Company Performance-Based Regulation Plan Filing

Weather Adjustment Revenue (\$)

	<u>Jan</u>	<u>Feb</u>	Mar	Apr	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	Oct	Nov	<u>Dec</u>	<u>Total</u>
RESIDENTIAL				_	-			_	_				
R&T 1	0	0	0	0	0	0	0	0	0	0	0	0	0
R&T 2	0	0	0	0	0	0	0	0	0	0	0	0	0
R&T 3	(1,104,957)	(177,274)	(1,465,005)	354,702	(1,142,953)	(45,146)	0	0	153,394	95,951	220,754	(956,034)	(4,066,568)
R&T 4	(50,927)	(8,927)	(81,014)	21,662	(92,354)	(2,779)	0	0	6,643	4,126	10,527	(49,153)	(242,196)
Outdoor Lighting	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Residential	(1,155,884)	(186,201)	(1,546,019)	376,364	(1,235,307)	(47,925)	0	0	160,037	100,077	231,281	(1,005,187)	(4,308,764)
Commercial/Industrial													
G&T 40	(146,566)	(18,258)	(206,574)	53,632	(168,360)	(5,880)	0	0	20,179	15,430	38,302	(129,611)	(547,706)
G&T 50	0	0	0	0	0	0	0	0	0	0	0	0	0
G&T 41	(163,559)	(20,909)	(228,269)	59,864	(117,471)	(3,471)	0	0	15,159	11,221	41,511	(143,995)	(549,919)
G&T 51	0	0	0	0	0	0	0	0	0	0	0	0	0
G&T 42	(118,388)	(20,399)	(156,227)	38,265	(55,342)	(6,384)	0	0	7,667	4,545	22,235	(102,541)	(386,569)
G&T 52	0	0	0	0	0	0	0	0	0	0	0	0	0
G&T 43	(5,145)	(501)	(6,977)	1,954	(2,233)	(125)	0	0	331	199	948	(4,408)	(15,957)
G&T 53	0	0	0	0	<u>0</u>	0	<u>0</u>	<u>0</u>	0	<u>0</u>	<u>0</u>	0	0
Total G & T	(433,658)	(60,067)	(598,047)	153,715	(343,406)	(15,860)	0	0	43,336	31,395	102,996	(380,555)	(1,500,151)
Special Contract	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	(1,589,542)	(246,268)	(2,144,066)	530,079	(1,578,713)	(63,785)	0	0	203,373	131,472	334,277	(1,385,742)	(5,808,915)

Section 7

BAY STATE GAS COMPANY Typical Residential Heating Bill (R-3)

Effective November 2006

								Typical Usag	ge in inerms					1		-	T
Line <u>No.</u>			May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1			90	55	30	30	42	71	109	150	187	188	166	132	1,250	318	932
2 3 4 5 6 7	Current Base Rates Off-Peak Cust. Chg First 99999 therms @	\$10.00 \$0.2714	\$10.00 \$24.43	\$10.00 \$14.93	\$10.00 \$8.14	\$10.00 \$8.14	\$10.00 \$11.40	\$10.00 \$19.27							\$60 \$86 \$0	\$60 \$86 \$0	
8 9 10 11 12	Peak Cust. Chg First 99999 therms @	\$10.00 \$0.2714							\$10.00 \$29.58	\$10.00 \$40.71	\$10.00 \$50.75	\$10.00 \$51.02	\$10.00 \$45.05	\$10.00 \$35.83	\$60 \$253		\$60 \$253 \$0
13 14 15 16 17		\$10.68 \$0.2879	\$10.68 \$25.91	\$10.68 \$15.84	\$10.68 \$8.64	\$10.68 \$8.64	\$10.68 \$12.09	\$10.68 \$20.44							\$64 \$92	\$64.09 \$91.55	
18 19 20 21	Peak Cust. Chg First 99999 therms @	\$10.68 \$0.2879							\$10.68 \$31.38	\$10.68 \$43.19	\$10.68 \$53.84	\$10.68 \$54.13	\$10.68 \$47.79	\$10.68 \$38.00	\$64 \$268		\$64.09 \$268.32
22 23 24	2005 - 2006 Base Rate Amount 2006 - 2007 Base Rate Amount		\$34.43 \$36.59	\$24.93 \$26.52	\$18.14 \$19.32	\$18.14 \$19.32	\$21.40 \$22.77	\$29.27 \$31.12	\$39.58 \$42.06	\$50.71 \$53.87	\$60.75 \$64.52	\$61.02 \$64.81	\$55.05 \$58.47	\$45.83 \$48.68	\$459 \$488	\$146 \$156	\$313 \$332
25 26 27 28	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.4763 \$0.0394	\$1.4763 \$0.0394	\$1.4763 \$0.0394	\$1.2356 \$0.0394	\$1.2356 \$0.0394	\$1.2356 \$0.0394			
29 30 31 32	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.4763 \$0.0394	\$1.4763 \$0.0394	\$1.4763 \$0.0394	\$1.2356 \$0.0394	\$1.2356 \$0.0394	\$1.2356 \$0.0394			
33 34 35 36	Total Bill Pre PBR Total Bill Post PBR Difference		\$133.61 <u>\$135.77</u> \$2.16	\$85.54 <u>\$87.13</u> \$1.59	\$51.20 <u>\$52.38</u> \$1.18	\$51.20 <u>\$52.38</u> \$1.18	\$67.68 \$69.06 \$1.38	\$107.51 <u>\$109.36</u> \$1.85	\$204.79 <u>\$207.27</u> \$2.48	\$278.07 <u>\$281.22</u> \$3.15	\$344.19 <u>\$347.95</u> \$3.76	\$300.72 <u>\$304.51</u> \$3.79	\$266.70 <u>\$270.12</u> \$3.42	\$214.13 <u>\$216.98</u> \$2.85	\$2,105 <u>\$2,134</u> \$29	\$497 <u>\$506</u> \$9	\$1,609 <u>\$1,628</u> \$19
36 37 38	% Chg		1.62%	1.86%	2.30%	2.30%	2.04%	1.72%	1.21%	1.13%	1.09%	1.26%	1.28%	1.33%	1.37%	1.88%	1.21%
39	Average monthly impact														\$ 2.40	\$ 1.56	3.24
40 41	% Change to Base Rates														6.27%	6.38%	6.22%

BAY STATE GAS COMPANY Typical Residential Non-Heating Bill (R-1)

Effective November 2006

1 :								Typical Usag	ge in Therms					Г	1	Tatal	Tatal
Line <u>No.</u>			May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1			17	17	15	14	7	15	15	18	19	20	19	19	195	85	110
2	<u>Current Base Rates</u> Off-Peak																
4 5 6	Cust. Chg First 99999 therms @	\$10.00 \$0.2684	\$10.00 \$4.56	\$10.00 \$4.56	\$10.00 \$4.03	\$10.00 \$3.76	\$10.00 \$1.88	\$10.00 \$4.03							\$60 \$23 \$0	\$60 \$23 \$0	
8 9 10 11	Peak Cust. Chg First 99999 therms @	\$10.00 \$0.2684							\$10.00 \$4.03 \$0.00	\$10.00 \$4.83 \$0.00	\$10.00 \$5.10 \$0.00	\$10.00 \$5.37 \$0.00	\$10.00 \$5.10 \$0.00	\$10.00 \$5.10 \$0.00	\$60 \$30 \$0		\$60 \$30 \$0
13	New Base Rates Effective 11/1/06																
14 15 16 17	Off-Peak Cust. Chg First 99999 therms @	\$10.68 \$0.2820	\$10.68 \$4.79	\$10.68 \$4.79	\$10.68 \$4.23	\$10.68 \$3.95	\$10.68 \$1.97	\$10.68 \$4.23							\$64 \$24	\$64 \$24	
18	Peak																
19 20 21	Cust. Chg First 99999 therms @	\$10.68 \$0.2820							\$10.68 \$4.23	\$10.68 \$5.08	\$10.68 \$5.36	\$10.68 \$5.64	\$10.68 \$5.36	\$10.68 \$5.36	\$64 \$31		\$64 \$31
22 23 24	2005 - 2006 Base Rate Amount 2006 - 2007 Base Rate Amount		\$14.56 \$15.48	\$14.56 \$15.48	\$14.03 \$14.91	\$13.76 \$14.63	\$11.88 \$12.66	\$14.03 \$14.91	\$14.03 \$14.91	\$14.83 \$15.76	\$15.10 \$16.04	\$15.37 \$16.32	\$15.10 \$16.04	\$15.10 \$16.04	\$172 \$183	\$83 \$88	\$90 \$95
25	Nov 2005-Oct 2006																
26 27 28	CGA Rates - (Seasonal) LDAF		\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.4509 \$0.0303	\$1.4509 \$0.0303	\$1.4509 \$0.0303	\$1.2102 \$0.0303	\$1.2102 \$0.0303	\$1.2102 \$0.0303			
29 30 31 32	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.4509 \$0.0303	\$1.4509 \$0.0303	\$1.4509 \$0.0303	\$1.2102 \$0.0303	\$1.2102 \$0.0303	\$1.2102 \$0.0303			
33 34 35	Total Bill Pre PBR Total Bill Post PBR Difference		\$32.35 <u>\$33.27</u> \$0.92	\$32.35 <u>\$33.27</u> \$0.92	\$29.72 <u>\$30.61</u> \$0.89	\$28.41 <u>\$29.28</u> \$0.87	\$19.20 <u>\$19.98</u> \$0.78	\$29.72 <u>\$30.61</u> \$0.89	\$36.24 <u>\$37.13</u> \$0.89	\$41.49 <u>\$42.42</u> \$0.93	\$43.24 <u>\$44.18</u> \$0.94	\$40.18 <u>\$41.13</u> \$0.95	\$38.67 <u>\$39.61</u> \$0.94	\$38.67 <u>\$39.61</u> \$0.94	\$410 <u>\$421</u> \$11	\$172 <u>\$177</u> \$5	\$238 <u>\$244</u> \$6
36 37	% Chg		2.84%	2.84%	2.99%	3.06%	4.06%	2.99%	2.46%	2.24%	2.17%	2.36%	2.43%	2.43%	2.65%	3.07%	2.34%
38 39 40	Average monthly impact														\$ 0.90	\$ 0.88	0.93
	% Change to Base Rates														6.30%	6.36%	6.24%

BAY STATE GAS COMPANY Typical C&I Low Annual/Low Winter Bill (G-50)

Effective November 2006

1 :								Typical Usag	je in i nerms					ı		Tatal	Tatal
Line <u>No.</u>			May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1			125	105	101	93	99	119	172	172	202	199	200	166	1,753	642	1,111
2	Current Base Rates Off-Peak																
4 5 6 7	Cust. Chg First 99999 therms @	\$16.00 \$0.2699	\$16.00 \$33.74	\$16.00 \$28.34	\$16.00 \$27.26	\$16.00 \$25.10	\$16.00 \$26.72	\$16.00 \$32.12							\$96 \$173 \$0	\$96 \$173 \$0	
8 9 10 11	Peak Cust. Chg First 99999 therms @	\$16.00 \$0.2699							\$16.00 \$46.42	\$16.00 \$46.42	\$16.00 \$54.52	\$16.00 \$53.71	\$16.00 \$53.98	\$16.00 \$44.80	\$96 \$300		\$96 \$300
12 13 14	New Base Rates Effective 11/1/06 Off-Peak					2									2122	•	
15 16 17	Cust. Chg First 99999 therms @	\$17.09 \$0.2864	\$17.09 \$35.80	\$17.09 \$30.07	\$17.09 \$28.93	\$17.09 \$26.64	\$17.09 \$28.35	\$17.09 \$34.08							\$103 \$184	\$103 \$184	
18 19 20 21	Peak Cust. Chg First 99999 therms @	\$17.09 \$0.2864							\$17.09 \$49.26	\$17.09 \$49.26	\$17.09 \$57.85	\$17.09 \$56.99	\$17.09 \$57.28	\$17.09 \$47.54	\$103 \$318		\$103 \$318
22 23 24	2005 - 2006 Base Rate Amount 2006 - 2007 Base Rate Amount		\$49.74 \$52.89	\$44.34 \$47.16	\$43.26 \$46.02	\$41.10 \$43.73	\$42.72 \$45.44	\$48.12 \$51.17	\$62.42 \$66.35	\$62.42 \$66.35	\$70.52 \$74.94	\$69.71 \$74.08	\$69.98 \$74.37	\$60.80 \$64.63	\$665 \$707	\$269 \$286	\$396 \$421
25 26 27 28	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454			
29 30 31 32	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454			
33 34 35	Total Bill Pre PBR Total Bill Post PBR Difference		\$181.56 <u>\$184.72</u> \$3.16	\$155.07 <u>\$157.90</u> \$2.83	\$149.77 <u>\$152.53</u> \$2.76	\$139.18 <u>\$141.80</u> \$2.62	\$147.13 <u>\$149.85</u> \$2.72	\$173.62 <u>\$176.67</u> \$3.05	\$319.79 \$323.71 \$3.92	\$319.79 <u>\$323.71</u> \$3.92	\$372.77 <u>\$377.20</u> \$4.43	\$319.57 \$323.95 \$4.38	\$321.10 \$325.49 \$4.39	\$269.23 <u>\$273.06</u> \$3.83	\$2,869 <u>\$2,911</u> \$42	\$946 <u>\$963</u> \$17	\$1,922 <u>\$1,947</u> \$25
36 37 38	% Chg		1.74%	1.82%	1.84%	1.88%	1.85%	1.76%	1.23%	1.23%	1.19%	1.37%	1.37%	1.42%	1.46%	1.81%	1.29%
39 40	Average monthly impact														\$ 3.50	\$ 2.86	\$ 4.14
41	% Change to Base Rates														6.32%	6.37%	6.28%

BAY STATE GAS COMPANY Typical C&I Low Annual/High Winter Bill (G-40)

Effective November 2006

								Typical Usag	ge In Therms							i	
Line <u>No.</u>			May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1 2	Current Base Rates		84	38	25	24	25	49	103	216	300	300	271	169	1,604	245	1,359
3 4 5 6 7	Off-Peak Cust. Chg First 99999 therms @	\$16.00 \$0.2868	\$16.00 \$24.09	\$16.00 \$10.90	\$16.00 \$7.17	\$16.00 \$6.88	\$16.00 \$7.17	\$16.00 \$14.05							\$96 \$70	\$96 \$70 \$0	
8 9 10 11 12	Peak Cust. Chg First 99999 therms @	\$16.00 \$0.2868							\$16.00 \$29.54	\$16.00 \$61.95	\$16.00 \$86.04	\$16.00 \$86.04	\$16.00 \$77.72	\$16.00 \$48.47	\$96 \$390		\$96 \$390 \$0
13 14 15 16	New Base Rates Effective 11/1/06 Off-Peak Cust. Chg First 99999 therms @	\$17.09 \$0.3042	\$17.09 \$25.55	\$17.09 \$11.56	\$17.09 \$7.61	\$17.09 \$7.30	\$17.09 \$7.61	\$17.09 \$14.91							\$103 \$75	\$103 \$75	
18 19 20 21	Peak Cust. Chg First 99999 therms @	\$17.09 \$0.3042							\$17.09 \$31.33	\$17.09 \$65.71	\$17.09 \$91.26	\$17.09 \$91.26	\$17.09 \$82.44	\$17.09 \$51.41	\$103 \$413		\$103 \$413
22 23 24	2005 - 2006 Base Rate Amount 2006 - 2007 Base Rate Amount		\$40.09 \$42.64	\$26.90 \$28.65	\$23.17 \$24.70	\$22.88 \$24.39	\$23.17 \$24.70	\$30.05 \$32.00	\$45.54 \$48.42	\$77.95 \$82.80	\$102.04 \$108.35	\$102.04 \$108.35	\$93.72 \$99.53	\$64.47 \$68.50	\$652 \$693	\$166 \$177	\$486 \$516
25 26 27 28	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454			
29 30 31 32	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454			
33 34 35 36	Total Bill Pre PBR Total Bill Post PBR Difference		\$132.79 <u>\$135.35</u> \$2.56	\$68.83 <u>\$70.59</u> \$1.76	\$50.76 <u>\$52.29</u> \$1.53	\$49.37 <u>\$50.88</u> \$1.51	\$50.76 <u>\$52.29</u> \$1.53	\$84.13 <u>\$86.07</u> \$1.94	\$202.28 <u>\$205.16</u> \$2.88	\$406.64 <u>\$411.48</u> \$4.84	\$558.55 <u>\$564.86</u> \$6.31	\$486.34 \$492.65 \$6.31	\$440.87 <u>\$446.68</u> \$5.81	\$280.96 <u>\$284.99</u> \$4.03	\$2,812 \$2,853 \$41	\$437 <u>\$447</u> \$11	\$2,376 <u>\$2,406</u> \$30
37 38	% Chg		1.93%	2.56%	3.01%	3.06%	3.01%	2.31%	1.42%	1.19%	1.13%	1.30%	1.32%	1.43%		2.48%	1.27%
39 40	Average monthly impact														\$ 3.42	\$ 1.81	
41	% Change to Base Rates														6.29%	6.51%	6.21%

BAY STATE GAS COMPANY Typcial C&I Medium Annual/Low Winter Bill (G-51)

Effective November 2006

1 :								Typical Usa	ige in Therms					ĺ		T-4-1	T-4-1
Line <u>No.</u>	C&I Medium Annual/Low Winter (G-51)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1	Comment Dana Batan		790	794	763	726	731	807	941	1,210	1,364	1,294	1,321	1,078	11,819	4,611	7,208
2	<u>Current Base Rates</u> Off-Peak																
4 5 6 7	Cust. Chg	\$65.00 \$0.0693	\$65.00 \$54.75	\$65.00 \$55.02	\$65.00 \$52.88	\$65.00 \$50.31	\$65.00 \$50.66	\$65.00 \$55.93							\$390 \$320	\$390 \$320	
8	Peak																
9 10 11 12	Cust. Chg	\$65.00 \$0.1490							\$65.00 \$140.21	\$65.00 \$180.29	\$65.00 \$203.24	\$65.00 \$192.81	\$65.00 \$196.83	\$65.00 \$160.62	\$390 \$1,074		\$390 \$1,074 \$0
13	New Base Rates Effective 11/1/06																
14	Off-Peak																
15 16 17	Cust. Chg First 99999 therms @	\$69.43 \$0.0735	\$69.43 \$58.07	\$69.43 \$58.36	\$69.43 \$56.08	\$69.43 \$53.36	\$69.43 \$53.73	\$69.43 \$59.32							\$417 \$339	\$417 \$339	
18	Peak																
19 20 21	Cust. Chg First 99999 therms @	\$69.43 \$0.1580							\$69.43 \$148.68	\$69.43 \$191.18	\$69.43 \$215.51	\$69.43 \$204.45	\$69.43 \$208.72	\$69.43 \$170.32	\$417 \$1,139		\$417 \$1,139
22	2005 - 2006 Base Rate Amount		\$119.75	\$120.02	\$117.88	\$115.31	\$115.66	\$120.93	\$205.21	\$245.29	\$268.24	\$257.81	\$261.83	\$225.62	\$2,174	\$710	\$1,464
23 24	2006 - 2007 Base Rate Amount		\$127.50	\$127.79	\$125.51	\$122.79	\$123.16	\$128.75	\$218.11	\$260.61	\$284.94	\$273.88	\$278.15	\$239.75	\$2,311	\$755	\$1,555
25 26	Nov 2005-Oct 2006 CGA Rates - (Seasonal)		\$1.0129	\$1.0129	\$1.0129	\$1.0129	\$1.0129	\$1.0129	\$1.4509	\$1.4509	\$1.4509	\$1.2102	\$1.2102	\$1.2102			
27 28	LDAF		\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0454	\$0.0454	\$0.0454	\$0.0454	\$0.0454	\$0.0454			
29	Nov 2005-Oct 2006																
30 31	CGA Rates - (Seasonal) LDAF		\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454			
32 33	Total Bill Pre PBR		\$952.88	\$957.38	\$922.54	\$880.95	\$886.57	\$971.99	\$1,613.23	\$2,055.81	\$2,309.19	\$1,882.55	\$1,920.48	\$1,579.16	\$16,933	\$5,572	\$11,360
34 35	Total Bill Post PBR Difference		\$960.63 \$7.75	\$965.14 \$7.76	\$930.17 \$7.63	\$888.43 \$7.48	\$894.07 \$7.50	\$979.81 \$7.82	\$1,626.13 \$12.90	\$2,071.13 \$15.32	\$2,325.90 \$16.71	\$1,898.63 \$16.08	\$1,936.80 \$16.32	\$1,593.29 \$14.13	\$17,070 \$137	\$5,618 \$46	\$11,452 \$91
36	Difference		\$1.15	φ1.16	\$1.03	φ1.40	φ1.50	\$1.02	\$12.90	\$15.32	\$10.71	φ10.0o	\$10.32	\$14.13	\$137	\$40	фэт
37 38	% Chg		0.81%	0.81%	0.83%	0.85%	0.85%	0.80%	0.80%	0.75%	0.72%	0.85%	0.85%	0.89%	0.81%	0.82%	0.81%
39 40	Average monthly impact														\$ 11.45	\$ 7.66	\$ 15.24
41	% Change to Base Rates														6.32%	6.47%	6.25%

BAY STATE GAS COMPANY Typical C&I Medium Annual/High Winter Bill (G-41)

Effective November 2006

								i ypicai Osc	ige iii Tileiilis					ı		Tatal	Total
Line <u>No.</u>		1	May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Peak (15)
1 2	Current Base Rates		665	302	164	146	174	374	824	2,139	2,170	2,294	1,971	1,270	12,493	1,825	10,668
3 4 5 6 7	Off-Peak Cust. Chg First 99999 therms @	\$65.00 \$0.1006	\$65.00 \$180.48	\$65.00 \$81.96	\$65.00 \$44.51	\$65.00 \$39.62	\$65.00 \$47.22	\$65.00 \$101.50							\$390 \$495	\$390 \$495	
8 9 10 11	Peak Cust. Chg First 99999 therms @	\$65.00 \$0.1588							\$65.00 \$223.63	\$65.00 \$580.53	\$65.00 \$588.94	\$65.00 \$622.59	\$65.00 \$534.93	\$65.00 \$344.68	\$390 \$2,895		\$390 \$2,895
12 13 14 15 16 17	New Base Rates Effective 11/1/06 Off-Peak Cust. Chg First 99999 therms @	\$69.43 \$0.1067	\$69.43 \$191.45	\$69.43 \$86.95	\$69.43 \$47.22	\$69.43 \$42.03	\$69.43 \$50.10	\$69.43 \$107.68							\$417 \$525	\$417 \$525	
18 19 20 21	Cust. Chg First 99999 therms @	\$69.43 \$0.1684							\$69.43 \$237.23	\$69.43 \$615.82	\$69.43 \$624.74	\$69.43 \$660.44	\$69.43 \$567.45	\$69.43 \$365.63	\$417 \$3,071		\$417 \$3,071
22 23 24	2005 - 2006 Base Rate Amount 2006 - 2007 Base Rate Amount		\$245.48 \$260.88	\$146.96 \$156.38	\$109.51 \$116.65	\$104.62 \$111.46	\$112.22 \$119.53	\$166.50 \$177.11	\$288.63 \$306.66	\$645.53 \$685.25	\$653.94 \$694.17	\$687.59 \$729.87	\$599.93 \$636.88	\$409.68 \$435.06	\$4,171 \$4,430	\$885 \$942	\$3,285 \$3,488
25 26 27 28	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454			
29 30 31 32	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454			
33 34 35 36	Total Bill Pre PBR Total Bill Post PBR Difference		\$979.38 \$994.78 \$15.40	\$480.25 <u>\$489.66</u> \$9.41	\$290.50 <u>\$297.64</u> \$7.14	\$265.75 <u>\$272.59</u> \$6.84	\$304.25 <u>\$311.55</u> \$7.30	\$579.25 \$589.85 \$10.60	\$1,542.51 <u>\$1,560.54</u> \$18.03	\$3,900.44 \$3,940.16 \$39.72	\$3,956.03 \$3,996.26 \$40.23	\$3,626.21 \$3,668.49 \$42.28	\$3,124.78 \$3,161.73 \$36.95	\$2,036.55 \$2,061.93 \$25.38	\$21,086 <u>\$21,345</u> \$259	\$2,899 <u>\$2,956</u> \$57	\$18,187 <u>\$18,389</u> \$203
37 38	% Chg		1.57%	1.96%	2.46%	2.57%	2.40%	1.83%	1.17%	1.02%	1.02%	1.17%	1.18%	1.25%	1.23%	1.96%	1.11%
39 40	Average monthly impact														•	,	\$ 33.76
41	% Change to Base Rates														6.22%	6.40%	6.17%

BAY STATE GAS COMPANY Typical C&I High Annual/Low Winter Bill (G-52)

Effective November 2006

1 :								Typical Usa	age in Therms	5				ĺ		Total	Total
Line <u>No.</u>			May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Off-Peak (14)	Peak (15)
1 2	Current Base Rates		11,042	10,120	9,172	8,320	9,745	11,262	12,094	14,442	17,547	16,095	15,704	14,183	149,726	59,661	90,065
3 4 5 6	Off-Peak Cust. Chg First 999999 therms @	\$213.00 \$0.0539	\$213.00 \$2,996.80	\$213.00 \$2,746.57	\$213.00 \$2,489.28	\$213.00 \$2,258.05	\$213.00 \$2,644.79	\$213.00 \$3,056.51							\$1,278 \$16,192	\$1,278 \$16,192	
7 8 9 10 11 12	Peak Cust. Chg First 999999 therms @	\$213.00 \$0.1380							\$213.00 \$3,282.31	\$213.00 \$3,919.56	\$213.00 \$4,762.26	\$213.00 \$4,368.18	\$213.00 \$4,262.07	\$213.00 \$3,849.27	\$1,278 \$24,444		\$1,278 \$24,444 \$0
13 14 15 16	New Base Rates Effective 11/1/06 Off-Peak Cust. Chg First 999999 therms @	\$227.53 \$0.0572	\$227.53 \$3,178.99	\$227.53 \$2,913.55	\$227.53 \$2,640.62	\$227.53 \$2,395.33	\$227.53 \$2,805.59	\$227.53 \$3,242.33							\$1,365 \$17,176	\$1,365 \$17,176	
18 19 20 21	Peak Cust. Chg First 999999 therms @	\$227.53 \$0.1465							\$227.53 \$3,481.86	\$227.53 \$4,157.85	\$227.53 \$5,051.78	\$227.53 \$4,633.75	\$227.53 \$4,521.18	\$227.53 \$4,083.29	\$1,365 \$25,930		\$1,365 \$25,930
22 23 24	2005 - 2006 Base Rate Amount 2006 - 2007 Base Rate Amount		\$3,209.80 \$3,406.52	\$2,959.57 \$3,141.08	\$2,702.28 \$2,868.15	\$2,471.05 \$2,622.86	\$2,857.79 \$3,033.12	\$3,269.51 \$3,469.86	\$3,495.31 \$3,709.39	\$4,132.56 \$4,385.38	\$4,975.26 \$5,279.31	\$4,581.18 \$4,861.28	\$4,475.07 \$4,748.71	\$4,062.27 \$4,310.82	\$43,192 \$45,836	\$17,470 \$18,542	\$25,722 \$27,295
25 26 27 28	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454			
29 30 31 32	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454			
33 34 35 36	Total Bill Pre PBR Total Bill Post PBR Difference		\$14,854.69 <u>\$15,051.42</u> \$196.73	\$13,632.12 <u>\$13,813.63</u> \$181.51	\$12,375.07 <u>\$12,540.94</u> \$165.87	\$11,245.32 <u>\$11,397.13</u> \$151.81	\$13,134.87 <u>\$13,310.19</u> \$175.32	\$15,146.41 <u>\$15,346.77</u> \$200.36	\$21,591.56 \$21,805.65 \$214.09	\$25,742.12 \$25,994.95 \$252.83	\$31,230.83 \$31,534.89 \$304.06	\$24,790.07 \$25,070.16 \$280.09	\$24,193.01 <u>\$24,466.65</u> \$273.64	\$21,870.44 \$22,118.99 \$248.55	\$229,807 <u>\$232,451</u> \$2,645	\$80,388 <u>\$81,460</u> \$1,072	\$149,418 <u>\$150,991</u> \$1,573
37 38	% Chg		1.32%	1.33%	1.34%	1.35%	1.33%	1.32%	0.99%	0.98%	0.97%	1.13%	1.13%	1.14%	1.15%	1.33%	1.05%
39 40	Average monthly impact														\$ 220.40	•	\$ 262.21
41	% Change to Base Rates														6.12%	6.13%	6.12%

BAY STATE GAS COMPANY typical C&I High Annual/High Winter Bill (G-42)

Effective November 2006

Typical Heage In Therme

								Typical Us	age In Therms	5							
Line <u>No.</u>			May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1	Current Base Rates		4,642	2,353	2,618	1,332	2,227	2,937	7,027	12,107	13,541	13,233	12,504	8,364	82,885	16,109	66,776
3 4 5 6	Off-Peak Cust. Chg First 999999 therms @	\$213.00 \$0.0644	\$213.00 \$1,259.84	\$213.00 \$638.60	\$213.00 \$710.53	\$213.00 \$361.51	\$213.00 \$604.41	\$213.00 \$797.10							\$1,278 \$4,372	\$1,278 \$4,372	
8 9 10 11 12	Peak Cust. Chg First 999999 therms @	\$213.00 \$0.1485							\$213.00 \$1,907.13	\$213.00 \$3,285.84	\$213.00 \$3,675.03	\$213.00 \$3,591.44	\$213.00 \$3,393.59	\$213.00 \$2,269.99	\$1,278 \$18,123		\$1,278 \$18,123
13 14	New Base Rates Effective 11/1/06 Off-Peak																
15 16 17	Cust. Chg First 99999 therms @	\$227.53 \$0.0683	\$227.53 \$1,336.43	\$227.53 \$677.43	\$227.53 \$753.72	\$227.53 \$383.48	\$227.53 \$641.15	\$227.53 \$845.56							\$1,365 \$4,638	\$1,365 \$4,638	
18 19 20 21	Peak Cust. Chg First 99999 therms @	\$227.53 \$0.1576							\$227.53 \$2,023.07	\$227.53 \$3,485.61	\$227.53 \$3,898.45	\$227.53 \$3,809.78	\$227.53 \$3,599.90	\$227.53 \$2,408.00	\$1,365 \$19,225		\$1,365 \$19,225
22 23 24	2005 - 2006 Base Rate Amount 2006 - 2007 Base Rate Amount		\$1,472.84 \$1,563.96	\$851.60 \$904.96	\$923.53 \$981.25	\$574.51 \$611.01	\$817.41 \$868.68	\$1,010.10 \$1,073.09	\$2,120.13 \$2,250.60	\$3,498.84 \$3,713.14	\$3,888.03 \$4,125.98	\$3,804.44 \$4,037.31	\$3,606.59 \$3,827.43	\$2,482.99 \$2,635.53	\$25,051 \$26,593	\$5,650 \$6,003	\$19,401 \$20,590
25 26 27 28	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454			
29 30 31 32	Nov 2005-Oct 2006 CGA Rates - (Seasonal) LDAF		\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454			
33 34 35 36	Total Bill Pre PBR Total Bill Post PBR Difference		\$6,595.75 \$6,686.87 \$91.12	\$3,448.37 <u>\$3,501.73</u> \$53.36	\$3,812.75 \$3,870.48 \$57.73	\$2,044.50 \$2,081.01 \$36.51	\$3,275.13 \$3,326.40 \$51.27	\$4,251.38 <u>\$4,314.37</u> \$62.99	\$12,813.11 <u>\$12,943.59</u> \$130.48	\$21,922.06 \$22,136.36 \$214.30	\$24,493.37 <u>\$24,731.32</u> \$237.95	\$20,755.91 \$20,988.78 \$232.87	\$19,624.21 \$19,845.06 \$220.85	\$13,197.27 <u>\$13,349.81</u> \$152.54	\$136,234 <u>\$137,776</u> \$1,542	\$23,428 <u>\$23,781</u> \$353	\$112,806 <u>\$113,995</u> \$1,189
37 38	% Chg		1.38%	1.55%	1.51%	1.79%	1.57%	1.48%	1.02%	0.98%	0.97%	1.12%	1.13%	1.16%	1.13%	1.51%	1.05%
39 40	Average monthly impact														\$ 128.50	\$ 58.83	\$ 198.16
	% Change to Base Rates														6.16%	6.25%	6.13%

Section 7 (a)

BAY STATE GAS COMPANY Typical Residential Heating Bill (R-3) Without Exogenous Factor Effective November 2006

								ypicai Usage	in Inerms					r			
Lin <u>No</u>	e . Residential Heating (R-3)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1 2	Current Base Rates		90	55	30	30	42	71	109	150	187	188	166	132	1,250	318	932
3 4 5 6	Off-Peak Cust. Chg First 99999 therms @	\$10.00 \$0.2714	\$10.00 \$24.43	\$10.00 \$14.93	\$10.00 \$8.14	\$10.00 \$8.14	\$10.00 \$11.40	\$10.00 \$19.27							\$60 \$86 \$0	\$60 \$86 \$0	
8 9 10 11 12	Cust. Chg First 99999 therms @	\$10.00 \$0.2714							\$10.00 \$29.58	\$10.00 \$40.71	\$10.00 \$50.75	\$10.00 \$51.02	\$10.00 \$45.05	\$10.00 \$35.83	\$60 \$253		\$60 \$253 \$0
13 14 15 16 17	Off-Peak Cust. Chg First 99999 therms @	\$10.31 \$0.2779	\$10.31 \$25.01	\$10.31 \$15.29	\$10.31 \$8.34	\$10.31 \$8.34	\$10.31 \$11.67	\$10.31 \$19.73							\$62 \$88	\$61.88 \$88.37	
18 19 20 21	Cust. Chg First 99999 therms @	\$10.31 \$0.2779							\$10.31 \$30.29	\$10.31 \$41.69	\$10.31 \$51.97	\$10.31 \$52.25	\$10.31 \$46.13	\$10.31 \$36.68	\$62 \$259		\$61.88 \$259.00
22 23 24			\$34.43 \$35.32	\$24.93 \$25.60	\$18.14 \$18.65	\$18.14 \$18.65	\$21.40 \$21.99	\$29.27 \$30.04	\$39.58 \$40.60	\$50.71 \$52.00	\$60.75 \$62.28	\$61.02 \$62.56	\$55.05 \$56.44	\$45.83 \$47.00	\$459 \$471	\$146 \$150	\$313 \$321
25 26	5 Nov 2005-Oct 2006 5 CGA Rates - (Seasonal) 7 LDAF 8		\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.4763 \$0.0394	\$1.4763 \$0.0394	\$1.4763 \$0.0394	\$1.2356 \$0.0394	\$1.2356 \$0.0394	\$1.2356 \$0.0394			
30 31 32	LDAF		\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.0619 \$0.0401	\$1.4763 \$0.0394	\$1.4763 \$0.0394	\$1.4763 \$0.0394	\$1.2356 \$0.0394	\$1.2356 \$0.0394	\$1.2356 \$0.0394			
33 34 35 36	3 Total Bill Pre PBR 4 Total Bill Post PBR 5 Difference		\$133.61 <u>\$134.50</u> \$0.89	\$85.54 <u>\$86.21</u> \$0.67	\$51.20 <u>\$51.71</u> \$0.51	\$51.20 <u>\$51.71</u> \$0.51	\$67.68 <u>\$68.27</u> \$0.59	\$107.51 <u>\$108.29</u> \$0.78	\$204.79 <u>\$205.82</u> \$1.03	\$278.07 <u>\$279.35</u> \$1.28	\$344.19 <u>\$345.72</u> \$1.53	\$300.72 \$302.26 \$1.54	\$266.70 \$268.09 \$1.39	\$214.13 <u>\$215.30</u> \$1.17	\$2,105 <u>\$2,117</u> \$12	\$497 <u>\$501</u> \$4	\$1,609 <u>\$1,617</u> \$8
37	7 % Chg		0.67%	0.78%	1.00%	1.00%	0.87%	0.73%	0.50%	0.46%	0.44%	0.51%	0.52%	0.55%	0.56%	0.80%	0.49%
39	Average monthly impact														\$ 0.99	\$ 0.66	\$ 1.32
41	% Change to Base Rates													Į	2.59%	2.70%	2.54%

BAY STATE GAS COMPANY Typical Residential Non-Heating Bill (R-1) Without Exogenous Factor Effective November 2006

							٦	Typical Usage	In Therms								
Lin <u>No</u>	e <u>. Residential Non-Heating (R-1)</u>		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1			17	17	15	14	7	15	15	18	19	20	19	19	195	85	110
2 3 4 5 6 7	Current Base Rates Off-Peak Cust. Chg First 99999 therms @	\$10.00 \$0.2684	\$10.00 \$4.56	\$10.00 \$4.56	\$10.00 \$4.03	\$10.00 \$3.76	\$10.00 \$1.88	\$10.00 \$4.03							\$60 \$23 \$0	\$60 \$23 \$0	
8 9 10 11 12	!	\$10.00 \$0.2684							\$10.00 \$4.03 \$0.00	\$10.00 \$4.83 \$0.00	\$10.00 \$5.10 \$0.00	\$10.00 \$5.37 \$0.00	\$10.00 \$5.10 \$0.00	\$10.00 \$5.10 \$0.00	\$60 \$30 \$0		\$60 \$30 \$0
13 14 15 16 17	Off-Peak Cust. Chg First 99999 therms @	\$10.31 \$0.2721	\$10.31 \$4.63	\$10.31 \$4.63	\$10.31 \$4.08	\$10.31 \$3.81	\$10.31 \$1.91	\$10.31 \$4.08							\$62 \$23	\$62 \$23	
18 19 20 21	Cust. Chg First 99999 therms @	\$10.31 \$0.2721							\$10.31 \$4.08	\$10.31 \$4.90	\$10.31 \$5.17	\$10.31 \$5.44	\$10.31 \$5.17	\$10.31 \$5.17	\$62 \$30		\$62 \$30
22 23 24	2 2005 - 2006 Base Rate Amount 3 2006 - 2007 Base Rate Amount		\$14.56 \$14.94	\$14.56 \$14.94	\$14.03 \$14.40	\$13.76 \$14.12	\$11.88 \$12.22	\$14.03 \$14.40	\$14.03 \$14.40	\$14.83 \$15.21	\$15.10 \$15.48	\$15.37 \$15.76	\$15.10 \$15.48	\$15.10 \$15.48	\$172 \$177	\$83 \$85	\$90 \$92
26	LDAF		\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.4509 \$0.0303	\$1.4509 \$0.0303	\$1.4509 \$0.0303	\$1.2102 \$0.0303	\$1.2102 \$0.0303	\$1.2102 \$0.0303			
	CGA Rates - (Seasonal) LDAF		\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.0129 \$0.0336	\$1.4509 \$0.0303	\$1.4509 \$0.0303	\$1.4509 \$0.0303	\$1.2102 \$0.0303	\$1.2102 \$0.0303	\$1.2102 \$0.0303			
33 34 35 36	3 Total Bill Pre PBR 5 Total Bill Post PBR 6 Difference		\$32.35 <u>\$32.73</u> \$0.38	\$32.35 <u>\$32.73</u> \$0.38	\$29.72 \$30.09 \$0.37	\$28.41 <u>\$28.77</u> \$0.36	\$19.20 <u>\$19.54</u> \$0.34	\$29.72 \$30.09 \$0.37	\$36.24 <u>\$36.61</u> \$0.37	\$41.49 <u>\$41.87</u> \$0.38	\$43.24 <u>\$43.63</u> \$0.39	\$40.18 <u>\$40.57</u> \$0.39	\$38.67 <u>\$39.05</u> \$0.38	\$38.67 <u>\$39.05</u> \$0.38	\$410 <u>\$415</u> \$4	\$172 <u>\$174</u> \$2	\$238 <u>\$241</u> \$2
37	' % Chg		1.17%	1.17%	1.24%	1.27%	1.77%	1.24%	1.02%	0.92%	0.90%	0.97%	0.98%	0.98%	1.09%	1.28%	0.96%
39	Average monthly impact														\$ 0.37	\$ 0.37	0.38
	% Change to Base Rates														2.61%	2.66%	2.56%

BAY STATE GAS COMPANY Typical C&I Low Annual/Low Winter Bill (G-50) Without Exogenous Factor Effective November 2006

							1	Typical Usage	In Therms								
Line <u>No</u>	e . <u>C&I Low Annual/Low Winter (G-50)</u>		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1 2	Current Base Rates		125	105	101	93	99	119	172	172	202	199	200	166	1,753	642	1,111
3 4 5 6 7	Off-Peak Cust. Chg First 99999 therms @	\$16.00 \$0.2699	\$16.00 \$33.74	\$16.00 \$28.34	\$16.00 \$27.26	\$16.00 \$25.10	\$16.00 \$26.72	\$16.00 \$32.12							\$96 \$173 \$0	\$96 \$173 \$0	
8 9 10 11 12		\$16.00 \$0.2699							\$16.00 \$46.42	\$16.00 \$46.42	\$16.00 \$54.52	\$16.00 \$53.71	\$16.00 \$53.98	\$16.00 \$44.80	\$96 \$300		\$96 \$300
13 14 15 16 17	Off-Peak Cust. Chg First 99999 therms @	\$16.50 \$0.2764	\$16.50 \$34.55	\$16.50 \$29.02	\$16.50 \$27.92	\$16.50 \$25.71	\$16.50 \$27.36	\$16.50 \$32.89							\$99 \$177	\$99 \$177	
18 19 20 21	Cust. Chg First 99999 therms @	\$16.50 \$0.2764							\$16.50 \$47.54	\$16.50 \$47.54	\$16.50 \$55.83	\$16.50 \$55.00	\$16.50 \$55.28	\$16.50 \$45.88	\$99 \$307		\$99 \$307
22 23 24	2005 - 2006 Base Rate Amount 2006 - 2007 Base Rate Amount		\$49.74 \$51.05	\$44.34 \$45.52	\$43.26 \$44.42	\$41.10 \$42.21	\$42.72 \$43.86	\$48.12 \$49.39	\$62.42 \$64.04	\$62.42 \$64.04	\$70.52 \$72.33	\$69.71 \$71.50	\$69.98 \$71.78	\$60.80 \$62.38	\$665 \$683	\$269 \$276	\$396 \$406
26 27 28	LDAF		\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454			
29 30 31 32	CGA Rates - (Seasonal) LDAF		\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454			
33 34 35 36	Total Bill Post PBR Difference		\$181.56 <u>\$182.88</u> \$1.32	\$155.07 <u>\$156.26</u> \$1.19	\$149.77 <u>\$150.93</u> \$1.16	\$139.18 <u>\$140.28</u> \$1.10	\$147.13 <u>\$148.27</u> \$1.14	\$173.62 <u>\$174.89</u> \$1.27	\$319.79 \$321.40 \$1.61	\$319.79 \$321.40 \$1.61	\$372.77 \$374.59 \$1.82	\$319.57 <u>\$321.37</u> \$1.80	\$321.10 \$322.90 \$1.80	\$269.23 <u>\$270.81</u> \$1.58	\$2,869 <u>\$2,886</u> \$17	\$946 <u>\$954</u> \$7	\$1,922 <u>\$1,932</u> \$10
37 38	% Chg		0.73%	0.77%	0.77%	0.79%	0.77%	0.73%	0.50%	0.50%	0.49%	0.56%	0.56%	0.59%	0.61%	0.76%	0.53%
39 40 41															\$ 1.45 2.62%	\$ 1.20 S	2.58%

BAY STATE GAS COMPANY Typical C&I Low Annual/High Winter Bill (G-40) Without Exogenous Factor Peak Period CGA Effective November 2006

								,,						Ī			
Lir <u>No</u>	e C&I Low Annual/High Winter (G-40)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1			84	38	25	24	25	49	103	216	300	300	271	169	1,604	245	1,359
2			04	55	20	24	20	40	100	210	500	000	271	100	1,004	240	1,000
4		\$16.00	\$16.00	\$16.00	\$16.00	\$16.00	\$16.00	\$16.00							\$96	\$96	
5 6 7	_	\$0.2868	\$24.09	\$10.90	\$7.17	\$6.88	\$7.17	\$14.05							\$70	\$70 \$0	
8																	
9		\$16.00							\$16.00	\$16.00	\$16.00	\$16.00	\$16.00	\$16.00	\$96		\$96
10 11		\$0.2868							\$29.54	\$61.95	\$86.04	\$86.04	\$77.72	\$48.47	\$390		\$390 \$0
12																	
13																	
14 15		\$16.50	\$16.50	\$16.50	\$16.50	\$16.50	\$16.50	\$16.50							\$99	\$99	
16		\$0.2936	\$24.66	\$11.16	\$7.34	\$7.05	\$7.34	\$14.39							\$72	\$72	
17		ψ0.2300	Ψ24.00	ψιιιο	ψ1.04	ψ1.00	ψ1.04	Ψ14.00							V/Z	Ψ/2	
18	3 Peak																
19		\$16.50							\$16.50	\$16.50	\$16.50	\$16.50	\$16.50	\$16.50	\$99		\$99
20		\$0.2936							\$30.24	\$63.42	\$88.08	\$88.08	\$79.57	\$49.62	\$399		\$399
22			\$40.09	\$26.90	\$23.17	\$22.88	\$23.17	\$30.05	\$45.54	\$77.95	\$102.04	\$102.04	\$93.72	\$64.47	\$652	\$166	\$486
23			\$41.16	\$20.90	\$23.84	\$23.55	\$23.84	\$30.89	\$46.74	\$79.92	\$102.04	\$102.04	\$96.07	\$66.12	\$669	\$100 \$171	\$498
24			*******	4	4	4	4_0.0	*******	*	*****	***************************************	*	******	****	*****	•	*
25																	
26			\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.4763	\$1.4763	\$1.4763	\$1.2356	\$1.2356	\$1.2356			
27			\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0454	\$0.0454	\$0.0454	\$0.0454	\$0.0454	\$0.0454			
29																	
30			\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.4763	\$1.4763	\$1.4763	\$1.2356	\$1.2356	\$1.2356			
3	I LDAF		\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0454	\$0.0454	\$0.0454	\$0.0454	\$0.0454	\$0.0454			
32																	
33			\$132.79	\$68.83	\$50.76	\$49.37	\$50.76	\$84.13	\$202.28	\$406.64	\$558.55	\$486.34	\$440.87	\$280.96	\$2,812	\$437	\$2,376
34 35			\$133.86 \$1.07	\$69.59 \$0.76	\$51.43 \$0.67	\$50.03 \$0.66	\$51.43 \$0.67	\$84.96 \$0.83	\$203.48 \$1.20	\$408.61 \$1.97	\$561.09 \$2.54	\$488.88 \$2.54	\$443.22 \$2.35	<u>\$282.61</u> \$1.65	\$2,829 \$17	<u>\$441</u> \$5	<u>\$2,388</u> \$12
36			Ψ1.07	\$0.70	Ψ0.07	Ψ0.00	Ψ0.07	Ψ0.03	Ψ1.20	Ψ1.57	Ψ2.54	Ψ2.54	Ψ2.55	ψ1.03	917	Ψ3	Ψ12
37	7 % Chg		0.81%	1.10%	1.32%	1.34%	1.32%	0.99%	0.59%	0.48%	0.45%	0.52%	0.53%	0.59%	0.60%	1.07%	0.52%
38															\$ 1.41	\$ 0.78	\$ 2.04
40															Ψ 1.71	Ų 0.70	2.04
4	% Change to Base Rates														2.59%	2.80%	2.52%

BAY STATE GAS COMPANY Typcial C&I Medium Annual/Low Winter Bill (G-51) Without Exogenous Factor Effective November 2006

		Typical Usage In Therms															
Line No. C&I Medium Annual/Low Winter (G-51)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)	
1	Current Base Rates		790	794	763	726	731	807	941	1,210	1,364	1,294	1,321	1,078	11,819	4,611	7,208
3 4 5 6	Off-Peak Cust. Chg First 99999 therms @	\$65.00 \$0.0693	\$65.00 \$54.75	\$65.00 \$55.02	\$65.00 \$52.88	\$65.00 \$50.31	\$65.00 \$50.66	\$65.00 \$55.93							\$390 \$320	\$390 \$320	
10 10 11 11	Peak Cust. Chg First 99999 therms @	\$65.00 \$0.1490							\$65.00 \$140.21	\$65.00 \$180.29	\$65.00 \$203.24	\$65.00 \$192.81	\$65.00 \$196.83	\$65.00 \$160.62	\$390 \$1,074		\$390 \$1,074 \$0
1: 1: 1: 1: 1:	Off-Peak Cust. Chg First 99999 therms @	\$67.04 \$0.0709	\$67.04 \$56.01	\$67.04 \$56.30	\$67.04 \$54.10	\$67.04 \$51.47	\$67.04 \$51.83	\$67.04 \$57.22							\$402 \$327	\$402 \$327	
1: 1: 2: 2	Cust. Chg First 99999 therms @	\$67.04 \$0.1525							\$67.04 \$143.50	\$67.04 \$184.53	\$67.04 \$208.01	\$67.04 \$197.34	\$67.04 \$201.45	\$67.04 \$164.40	\$402 \$1,099		\$402 \$1,099
2:	2 2005 - 2006 Base Rate Amount 3 2006 - 2007 Base Rate Amount		\$119.75 \$123.05	\$120.02 \$123.34	\$117.88 \$121.14	\$115.31 \$118.51	\$115.66 \$118.87	\$120.93 \$124.26	\$205.21 \$210.54	\$245.29 \$251.57	\$268.24 \$275.05	\$257.81 \$264.38	\$261.83 \$268.49	\$225.62 \$231.44	\$2,174 \$2,231	\$710 \$729	\$1,464 \$1,501
2	G CGA Rates - (Seasonal) 7 LDAF 3		\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454			
3 3 3	CGA Rates - (Seasonal) LDAF		\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.0129 \$0.0417	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.4509 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454	\$1.2102 \$0.0454			
3:	3 Total Bill Pre PBR 4 Total Bill Post PBR 5 Difference		\$952.88 <u>\$956.19</u> \$3.31	\$957.38 \$960.69 \$3.31	\$922.54 \$925.80 \$3.26	\$880.95 \$884.15 \$3.20	\$886.57 \$889.78 \$3.21	\$971.99 <u>\$975.32</u> \$3.33	\$1,613.23 <u>\$1,618.56</u> \$5.33	\$2,055.81 \$2,062.09 \$6.28	\$2,309.19 \$2,316.00 \$6.81	\$1,882.55 <u>\$1,889.12</u> \$6.57	\$1,920.48 <u>\$1,927.14</u> \$6.66	\$1,579.16 <u>\$1,584.97</u> \$5.81	\$16,933 <u>\$16,990</u> \$57	\$5,572 <u>\$5,592</u> \$20	\$11,360 <u>\$11,398</u> \$37
3:	7 % Chg		0.35%	0.35%	0.35%	0.36%	0.36%	0.34%	0.33%	0.31%	0.29%	0.35%	0.35%	0.37%	0.34%	0.35%	0.33%
3:	Average monthly impact														\$ 4.76	\$ 3.27	\$ 6.24
4	% Change to Base Rates														2.63%	2.77%	2.56%

BAY STATE GAS COMPANY Typical C&I Medium Annual/High Winter Bill (G-41) Without Exogenous Factor Effective November 2006

							1	ГурісаІ Usag	je in Therms								
Line No. C&I Medium Annual/High Winter (G-41)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)	
1 2	Current Base Rates		665	302	164	146	174	374	824	2,139	2,170	2,294	1,971	1,270	12,493	1,825	10,668
3 4 5 6 7	Off-Peak Cust. Chg First 99999 therms @	\$65.00 \$0.1006	\$65.00 \$180.48	\$65.00 \$81.96	\$65.00 \$44.51	\$65.00 \$39.62	\$65.00 \$47.22	\$65.00 \$101.50							\$390 \$495	\$390 \$495	
, 8 9 10 11 12		\$65.00 \$0.1588							\$65.00 \$223.63	\$65.00 \$580.53	\$65.00 \$588.94	\$65.00 \$622.59	\$65.00 \$534.93	\$65.00 \$344.68	\$390 \$2,895		\$390 \$2,895
13 14 15 16 17	Off-Peak Cust. Chg First 99999 therms @	\$67.04 \$0.1030	\$67.04 \$184.80	\$67.04 \$83.93	\$67.04 \$45.58	\$67.04 \$40.57	\$67.04 \$48.36	\$67.04 \$103.94							\$402 \$507	\$402 \$507	
18 19 20 21	Cust. Chg First 99999 therms @	\$67.04 \$0.1625							\$67.04 \$228.99	\$67.04 \$594.43	\$67.04 \$603.04	\$67.04 \$637.50	\$67.04 \$547.74	\$67.04 \$352.93	\$402 \$2,965		\$402 \$2,965
22 23 24	2005 - 2006 Base Rate Amount 2006 - 2007 Base Rate Amount		\$245.48 \$251.84	\$146.96 \$150.97	\$109.51 \$112.62	\$104.62 \$107.61	\$112.22 \$115.40	\$166.50 \$170.98	\$288.63 \$296.03	\$645.53 \$661.47	\$653.94 \$670.08	\$687.59 \$704.54	\$599.93 \$614.78	\$409.68 \$419.97	\$4,171 \$4,276	\$885 \$909	\$3,285 \$3,367
25 26 27 28	CGA Rates - (Seasonal) LDAF		\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454			
29 30 31 32	CGA Rates - (Seasonal) LDAF		\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.0619 \$0.0417	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.4763 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454	\$1.2356 \$0.0454			
33 34 35 36	Total Bill Post PBR Difference		\$979.38 \$985.74 \$6.36	\$480.25 \$484.25 \$4.00	\$290.50 \$293.61 \$3.11	\$265.75 \$268.74 \$2.99	\$304.25 \$307.42 \$3.17	\$579.25 \$583.72 \$4.47	\$1,542.51 <u>\$1,549.91</u> \$7.40	\$3,900.44 \$3,916.38 \$15.94	\$3,956.03 \$3,972.17 \$16.14	\$3,626.21 \$3,643.16 \$16.95	\$3,124.78 \$3,139.63 \$14.85	\$2,036.55 \$2,046.84 \$10.29	\$21,086 <u>\$21,192</u> \$106	\$2,899 <u>\$2,923</u> \$24	\$18,187 <u>\$18,268</u> \$82
37 38	% Chg		0.65%	0.83%	1.07%	1.13%	1.04%	0.77%	0.48%	0.41%	0.41%	0.47%	0.48%	0.51%	0.50%	0.83%	0.45%
39 40	1														\$ 8.81	\$ 4.02	
41	% Change to Base Rates														2.53%	2.72%	2.48%

BAY STATE GAS COMPANY Typical C&I High Annual/Low Winter Bill (G-52) Without Exogenous Factor Effective November 2006

No. C&I High Annual/Low Winter (G-52)	
1 1 1 1 1 1 1 1 1 1	Total Peak (15)
4 Cust. Chg \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$1,278 \$1,6,192 \$1,6,192 \$1,6,192 \$1,0,19	90,065
Cust. Chg \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$213.00 \$1,278 \$3,282.31 \$3,919.56 \$4,762.26 \$4,368.18 \$4,262.07 \$3,849.27 \$24,444 \$25,029 \$219.69 \$	
14 Off-Peak 15 Cust. Chg \$219.69 \$219.	\$1,278 \$24,444 \$0
19	
22 2005 - 2006 Base Rate Amount \$3,209.80 \$2,959.57 \$2,702.28 \$2,471.05 \$2,857.79 \$3,269.51 \$3,495.31 \$4,132.56 \$4,975.26 \$4,581.18 \$4,475.07 \$4,062.27 \$43,192 \$17,470 \$26,272 \$23 2005 - 2007 Base Rate Amount \$3,209.80 \$2,531.82 \$2,927.83 \$3,349.40 \$3,580.61 \$4,233.12 \$5,096.00 \$4,692.49 \$4,583.83 \$4,161.15 \$44,245 \$17,898 \$26,244 \$25 \$17,898 \$26,244 \$25 \$17,898 \$26,244 \$26 \$17,898 \$26,244 \$26 \$17,898 \$26,244 \$26 \$17,898 \$26,244 \$26 \$17,898 \$26,244 \$26 \$17,898 \$26,244 \$26 \$17,898 \$26,244 \$26 \$17,898 \$26,244 \$26 \$17,898 \$26,244 \$26 \$17,898 \$26,244 \$26 \$17,898 \$26,244 \$	\$1,318 \$25,029
26 CGA Rates - (Seasonal) \$1.0129 \$1.0129 \$1.0129 \$1.0129 \$1.0129 \$1.4509 \$1.4509 \$1.4509 \$1.4509 \$1.2102 \$1.2102 \$1.2102 \$27 LDAF \$0.0417 \$0.0417 \$0.0417 \$0.0417 \$0.0417 \$0.0417 \$0.0417 \$0.0417 \$0.0417 \$0.0454 \$0.	\$25,722 \$26,347
40	
29 Nov 2005-Oct 2006 30 CGA Rates - (Seasonal) \$1.0129 \$1.0129 \$1.0129 \$1.0129 \$1.0129 \$1.0129 \$1.4509 \$1.4509 \$1.4509 \$1.2102 \$1.2102 \$1.2102 31 LDAF \$0.0417 \$0.0417 \$0.0417 \$0.0417 \$0.0417 \$0.0417 \$0.0415 \$0.0454 \$0.04	
34 Total Bill Post PBR \$14,933.16 \$13,704.59 \$12,441.38 \$11,306.09 \$13,204.90 \$15,226.31 \$21,676.87 \$25,842.69 \$31,351.58 \$24,901.37 \$24,301.77 \$21,969.32 \$230,860 \$80,816 \$15	\$149,418 <u>\$150,044</u> \$626
37 % Chg 0.53% 0.53% 0.54% 0.54% 0.53% 0.53% 0.40% 0.39% 0.39% 0.45% 0.45% 0.45% 0.45% 0.53% 0.53% 0.53% 0.53%	0.42%
40	104.26 2.43%

BAY STATE GAS COMPANY typical C&I High Annual/High Winter Bill (G-42) Without Exogenous Factor Effective November 2006

				Typical Usage in Therms													
Line <u>No.</u>	C&I High Annual/High Winter (G-42	2)	May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total (13)	Total Off-Peak (14)	Total Peak (15)
1 2	Current Base Rates		4,642	2,353	2,618	1,332	2,227	2,937	7,027	12,107	13,541	13,233	12,504	8,364	82,885	16,109	66,776
3	Off-Peak																
4 5	Cust. Chg First 999999 therms @	\$213.00 \$0.0644	\$213.00 \$1,259.84	\$213.00 \$638.60	\$213.00 \$710.53	\$213.00 \$361.51	\$213.00 \$604.41	\$213.00 \$797.10							\$1,278 \$4,372	\$1,278 \$4,372	
6 7																	
8	Peak																
9 10	Cust. Chg First 999999 therms @	\$213.00 \$0.1485							\$213.00 \$1,907.13	\$213.00 \$3,285.84	\$213.00 \$3,675.03	\$213.00 \$3,591.44	\$213.00 \$3,393.59	\$213.00 \$2,269.99	\$1,278 \$18,123		\$1,278 \$18,123
11 12	1 1131 333333 tiletilis &	ψ0.1403							ψ1,907.13	ψ3,203.04	ψ3,073.03	ψ5,551.44	ψ0,000.00	Ψ2,203.33	ψ10,123		ψ10,123
13	New Base Rates Effective 11/1/06																
14 15	Off-Peak Cust. Chg	\$219.69	\$219.69	\$219.69	\$219.69	\$219.69	\$219.69	\$219.69							\$1,318	\$1,318	
16 17	First 99999 therms @	\$0.0660	\$1,290.01	\$653.90	\$727.54	\$370.16	\$618.88	\$816.19							\$4,477	\$4,477	
18	Peak																
19	Cust. Chg	\$219.69							\$219.69	\$219.69	\$219.69	\$219.69	\$219.69	\$219.69	\$1,318		\$1,318
20 21	First 99999 therms @	\$0.1521							\$1,952.80	\$3,364.54	\$3,763.04	\$3,677.45	\$3,474.86	\$2,324.36	\$18,557		\$18,557
22	2005 - 2006 Base Rate Amount		\$1,472.84	\$851.60	\$923.53	\$574.51	\$817.41	\$1,010.10	\$2,120.13	\$3,498.84	\$3,888.03	\$3,804.44	\$3,606.59	\$2,482.99	\$25,051	\$5,650	\$19,401
23 24			\$1,509.70	\$873.59	\$947.23	\$589.85	\$838.57	\$1,035.88	\$2,172.49	\$3,584.23	\$3,982.73	\$3,897.14	\$3,694.55	\$2,544.05	\$25,670	\$5,795	\$19,875
	Nov 2005-Oct 2006 CGA Rates - (Seasonal)		\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.4763	\$1.4763	\$1.4763	\$1.2356	\$1.2356	\$1.2356			
26 27	LDAF		\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0454	\$0.0454	\$0.0454	\$0.0454	\$0.0454	\$0.0454			
28																	
30	Nov 2005-Oct 2006 CGA Rates - (Seasonal)		\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.0619	\$1.4763	\$1.4763	\$1.4763	\$1.2356	\$1.2356	\$1.2356			
31	LDAF		\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0417	\$0.0454	\$0.0454	\$0.0454	\$0.0454	\$0.0454	\$0.0454			
32	T-t-LDIII D DDD		CO FOR 75	CO 440 07	CO 040 75	CO 044 50	CO 075 40	£4.054.00	640.040.44	CO4 000 00	CO 4 400 07	₾ 00 7 55 04	£40.004.04	£40.407.07	£400.004	£00,400	C440 000
33 34	Total Bill Pre PBR Total Bill Post PBR		\$6,595.75 \$6,632.61	\$3,448.37 \$3,470.36	\$3,812.75 \$3,836.46	\$2,044.50 \$2,059.85	\$3,275.13 \$3,296.29	\$4,251.38 \$4,277.16	\$12,813.11 \$12,865.48	\$21,922.06 \$22,007.45	\$24,493.37 \$24,588.07	\$20,755.91 \$20,848.61	\$19,624.21 \$19,712.18	\$13,197.27 \$13,258.33	\$136,234 \$136,853	\$23,428 \$23,573	\$112,806 \$113,280
35 36	Difference		\$36.86	\$21.99	\$23.71	\$15.35	\$21.16	\$25.78	\$52.37	\$85.39	\$94.70	\$92.70	\$87.97	\$61.06	\$619	\$145	\$474
37	% Chg		0.56%	0.64%	0.62%	0.75%	0.65%	0.61%	0.41%	0.39%	0.39%	0.45%	0.45%	0.46%	0.45%	0.62%	0.42%
38 39	Average monthly impact														\$ 51.59	\$ 24.14	\$ 79.03
40 41	% Change to Base Rates														2.47%	2.56%	2.44%

Section 8

M.D.T.E. No. 38 Cancels M.D.T.E. No. 5 First Revised Page 1 of 3

RESIDENTIAL NON-HEATING RESIDENTIAL RATE R-1

AVAILABILITY

Service is available under this rate at single locations for all domestic purposes, except for resale, in individual private dwellings and individual apartments including condominiums and their facilities as defined in G.L. Chapter 183A, Section 1 and DPU 86-159 dated February 6, 1987.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - BI-MONTHLY

The Bi-Monthly rate schedule applicable to all customers being served with Company meters that do <u>not</u> have an installed radio-based automated meter reading device is as follows:

Customer Charge Per Two Month Period \$21.36

Off-Peak All therms @ \$ 0.2820 per therm

Peak All therms @ \$ 0.2820 per therm

RATE - MONTHLY

The Monthly rate schedule applicable to all customers being served with Company meters that have an installed radio-based automated meter reading device is as follows:

Customer Charge Per One Month Period \$ 10.68

Off-Peak All therms @ \$ 0.2820 per therm

Peak All therms @ \$ 0.2820 per therm

Issued by: Stephen H. Bryant Issued On: September 15, 2006

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LOW INCOME RESIDENTIAL NON-HEATING RESIDENTIAL RATE R-2

AVAILABILITY

Service is available under this rate at single locations for all domestic purposes, except for resale, in individual private dwellings and individual apartments to persons who verify receipt of any means-tested public-benefit program or verify eligibility for the low-income home energy assistance program or its successor program, for which eligibility does not exceed 175 percent of the federal poverty level based on a household's gross income or other criteria approved by the Department.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - BI- MONTHLY

The Bi-Monthly rate schedule applicable to all customers being served with Company meters that do <u>not</u> have an installed radio-based automated meter-reading device is as follows:

Customer Charge Per Two Month Period \$ 12.82

Off-Peak - All therms @ \$ 0.1698 per therm

Peak - All therms @ \$0.1698 per therm

RATE - MONTHLY

The Monthly rate schedule applicable to all customers being served with Company meters that have an installed radio-based automated meter reading device is as follows:

Customer Charge Per One Month Period \$ 6.41

Off-Peak - All therms @ \$ 0.1698 per therm

Peak - All therms @ \$ 0.1698 per therm

Issued by: Stephen H. Bryant Issued On: September 15, 2006

Page 3 of 25

M.D.T.E. No. 40 Cancels M.D.T.E. No. 7 First Revised Page 1 of 2

RESIDENTIAL HEATING RESIDENTIAL RATE R-3

AVAILABILITY

Service is available under this rate at single domestic locations for all purposes, except for resale, in individual private dwellings and individual apartments including condominiums and their facilities as defined in G. L. Chapter 183A, Section 1 and DPU 86-159 dated February 6, 1987 where such residences are heated exclusively by means of permanently installed space heating equipment.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 10.68

Off-Peak All therms @ \$ 0.2879 per therm

Peak All therms @ \$ 0.2879 per therm

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

COST OF GAS ADJUSTMENT AND LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Cost of Gas Adjustment and Local Distribution Adjustment Clause apply to gas sold under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 41 Cancels M.D.T.E. No. 8 First Revised Page 1 of 3

LOW INCOME RESIDENTIAL HEATING RESIDENTIAL RATE R-4

AVAILABILITY

Service is available under this rate at single domestic locations for all purposes, except for resale, in individual private dwellings and individual apartments where such residences are heated exclusively by means of permanently attached space heating equipment to persons who verify receipt of any means-tested public-benefit program or verify eligibility for the low-income home energy assistance program or its successor program, for which eligibility does not exceed 175 percent of the federal poverty level based on a household's gross income or other criteria approved by the Department..

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 6.09

Off-Peak All therms @ \$ 0.1641 per therm

Peak All therms @ \$ 0.1641 per therm

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 42 Cancels M.D.T.E. No. 9 First Revised Page 1 of 2

COMMERCIAL AND INDUSTRIAL SERVICE (LOW ANNUAL USE / HIGH PEAK PERIOD USE) RATE G-40

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 17.09

Off-Peak All therms @ \$0.3042 per therm

Peak All therms @ \$0.3042 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of less than 5,000 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 43 Cancels M.D.T.E. No. 10 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (MEDIUM ANNUAL USE / HIGH PEAK PERIOD USE) RATE G-41

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 69.43

Off-Peak All therms @ \$0.1067 per therm

Peak All therms @ \$0.1684 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of between 5,000 therms and 39,999 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 44 Cancels M.D.T.E. No. 11 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (HIGH ANNUAL USE / HIGH PEAK PERIOD) RATE G-42

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 227.53

Off-Peak All therms @ \$0.0683 per therm

Peak All therms @ \$0.1576 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage between 40,000 and 249,999 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures. With the exception that customers whose annual use is greater than 249,999 therms, and if the Company has been unable to install an Automated Meter Reading Device, such customers also shall take service under this rate schedule.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 45 Cancels M.D.T.E. No. 12 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (EXTRA HIGH ANNUAL USE / HIGH PEAK PERIOD USE) RATE G-43

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month: \$834.26

Demand Rates: Off-Peak - @ \$ 0.5825 per therm of maximum daily gas

usage

Peak - @ \$ 1.8852 per therm of maximum daily gas

usage

Volumetric Rates: Off-Peak - @ \$0.0169 per therm

Peak - @ \$0.0443 per therm

CALCULATION OF DEMAND CHARGES

Demand charges shall be calculated by applying the Demand Rate to the actual measured maximum daily gas usage in the billing month.

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of 250,000 therms or more and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 46 Cancels M.D.T.E. No. 13 First Revised Page 1 of 2

COMMERCIAL AND INDUSTRIAL SERVICE (LOW ANNUAL USE / LOW PEAK PERIOD USE) RATE G-50

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 17.09

Off-Peak All therms @ \$0.2864 per therm

Peak All therms @ \$0.2864 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of less than 5,000 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

President Effective: September 1, 2006

M.D.T.E. No. 47 Cancels M.D.T.E. No. 14 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (MEDIUM ANNUAL USE / LOW PEAK PERIOD USE) RATE G-51

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 69.43

Off-Peak All therms @ \$0.0735 per therm

Peak All therms @ \$0.1580 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of between 5,000 and 39,999 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 48 Cancels M.D.T.E. No. 15 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (HIGH ANNUAL USE / LOW PEAK PERIOD USE) RATE G-52

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 227.53

Off-Peak All therms @ \$0.0572 per therm

Peak All therms @ \$0.1465 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage between 40,000 and 249,999 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures. With the exception that customers whose annual use is greater than 249,999 therms, and if the Company has been unable to install an Automated Meter Reading Device, such customers also shall take service under this rate schedule.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 49 Cancels M.D.T.E. No. 16 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (EXTRA HIGH ANNUAL USE / LOW PEAK PERIOD USE) RATE G-53

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month: \$834.26

Demand Rates: Off-Peak - @ \$ 0.5843 per therm of maximum daily gas usage

Peak - @ \$ 1.8909 per therm of maximum daily gas usage

Volumetric Rates: Off-Peak - @ \$ 0.0170 per therm

Peak - @ \$ 0.0444 per therm

CALCULATION OF DEMAND CHARGES

Demand charges shall be calculated by applying the Demand Rate to the actual measured maximum daily gas usage in the billing month.

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of 250,000 therms or more and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 50 Cancels M.D.T.E. No. 17 First Revised Page 1 of 2

OUTDOOR GAS LIGHTING SERVICE RATE L

AVAILABILITY

Service to all customers is available under this rate for outdoor gas lighting where a standard gas light is attached to the Company's existing distribution system, and when it is not feasible to meter gas for such lighting along with other gas used on the premises and bill the same under the rate in effect for all other service. All such installations shall be on private property. Service under this schedule is available only to those customers taking service under this rate as of December 14, 1979.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

\$ 2.31 per month per light.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

COST OF GAS ADJUSTMENT AND LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Cost of Gas Adjustment and Local Distribution Adjustment Clause apply to gas sold under this rate.

TERM OF CONTRACT

The terms of contract under this schedule shall be for an initial period of one year, and shall continue in effect thereafter until canceled by either party on 30 days' written notice.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 51 Cancels M.D.T.E. No. 21 First Revised Page 1 of 3

NON-HEATING FIRM TRANSPORTATION SERVICE RESIDENTIAL RATE T-R1

AVAILABILITY

Service is available under this rate at single domestic locations throughout the territory served by the Company for transportation of supplier-owned gas used in individual private dwellings and individual apartments including condominiums and their facilities as defined in G. L. Chapter 183A, Section 1 and DPU 86-159 dated February 6, 1987.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - BI-MONTHLY

The Bi-Monthly rate schedule applicable to all customers being served with Company meters that do <u>not</u> have an installed radio-based automated meter reading device is as follows:

Customer Charge Per Two Month Period \$21.36

Off-Peak - All therms @ \$0.2820 per therm

Peak - All therms @ \$0.2820 per therm

RATE - MONTHLY

The Monthly rate schedule applicable to all customers being served with Company meters that have an installed radio-based automated meter reading device is as follows:

Customer Charge Per One Month Period \$ 10.68

Off-Peak - All therms @ \$0.2820 per therm

Peak - All therms @ \$0.2820 per therm

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 52 Cancels M.D.T.E. No. 22 First Revised Page 1 of 3

LOW INCOME NON-HEATING FIRM TRANSPORTATION SERVICE RESIDENTIAL RATE T-R2

AVAILABILITY

Service is available under this rate at single domestic locations throughout the territory served by the Company for transportation of supplier-owned gas used in individual private dwellings and individual apartments for all domestic purposes to persons who verify receipt of any means-tested public-benefit program or verify eligibility for the low-income home energy assistance program or its successor program, for which eligibility does not exceed 175 percent of the federal poverty level based on a household's gross income or other criteria approved by the Department..

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - BI-MONTHLY

The Bi-Monthly rate schedule applicable to all customers being served with Company meters that do <u>not</u> have an installed radio-based automated meter reading device is as follows:

Customer Charge Per Two Month Period \$ 12.82

Off-Peak All therms @ \$0.1698 per therm

Peak All therms @ \$0.1698 per therm

RATE - MONTHLY

The Monthly rate schedule applicable to all customers being served with Company meters that have an installed radio-based automated meter reading device is as follows:

Customer Charge Per One Month Period \$ 6.41

Off-Peak All therms @ \$ 0.1698 per therm

Peak All therms @ \$0.1698 per therm

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 53 Cancels M.D.T.E. No. 23 First Revised Page 1 of 3

HEATING FIRM TRANSPORTATION SERVICE RESIDENTIAL RATE T-R3

AVAILABILITY

Service is available under this rate at single domestic locations throughout the territory served by the Company for transportation of supplier-owned gas used in individual private dwellings and individual apartments including condominiums and their facilities as defined in G. L. Chapter 183A, Section 1 and DPU 86-159 dated February 6, 1987 where such residences are heated exclusively by means of permanently installed space heating equipment.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 10.68

Off-Peak - All therms @ 0.2879 per therm

Peak - All therms @ 0.2879 per therm

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Local Distribution Adjustment Clause apply to gas transported under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 54 Cancels M.D.T.E. No. 24 First Revised Page 1 of 2

LOW INCOME HEATING FIRM TRANSPORTATION SERVICE RESIDENTIAL RATE T-R4

AVAILABILITY

Service is available under this rate at single domestic locations throughout the territory served by the Company to persons who verify receipt of any means-tested public-benefit program or verify eligibility for the low-income home energy assistance program or its successor program, for which eligibility does not exceed 175 percent of the federal poverty level based on a household's gross income or other criteria approved by the Department, for transportation of supplier-owned gas used in individual private dwellings and individual apartments where such residences are heated exclusively by means of permanently installed space heating equipment.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 6.09

Off-Peak All therms @ 0.1641 per therm

Peak All therms @ 0.1641 per therm

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 55 Cancels M.D.T.E. No. 25 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (LOW ANNUAL USE / HIGH PEAK PERIOD USE) RATE T-40

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 17.09

Off-Peak All therms @ \$0.3042 per therm

Peak All therms @ \$0.3042 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of less than 5,000 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 9, 2006

M.D.T.E. No. 56 Cancels M.D.T.E. No. 26 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (MEDIUM ANNUAL USE / HIGH PEAK PERIOD USE) RATE T-41

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 69.43

Off-Peak All therms @ \$0.1067 per therm

Peak All therms @ \$0.1684 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of between 5,000 therms and 39,999 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Local Distribution Adjustment Clause apply to gas throughput transported under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 57 Cancels M.D.T.E. No. 27 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (HIGH ANNUAL USE / HIGH PEAK PERIOD USE) RATE T-42

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 227.53

Off-Peak All therms @ \$0.0683 per therm

Peak All therms @ \$0.1576 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage between 40,000 and 249,999 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Local Distribution Adjustment Clause apply to gas throughput transported under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 58 Cancels M.D.T.E. No. 28 First Revised Page 1 of 3

FIRM TRANSPORTATION SERVICE (EXTRA HIGH ANNUAL USE / HIGH PEAK PERIOD USE) RATE T-43

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month: \$834.26

Demand Rates: Off-Peak @ \$ 0.5825 per therm of maximum daily gas usage

Peak @ \$ 1.8852 per therm of maximum daily gas usage

Volumetric Rates: Off-Peak @ \$ 0.0169 per therm

Peak @ \$ 0.0443 per therm

CALCULATION OF DEMAND CHARGES

Demand charges shall be calculated by applying the Demand Rate to the actual measured maximum daily gas usage in the billing month.

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of 250,000 therms or more and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 59 Cancels M.D.T.E. No. 29 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (LOW ANNUAL USE / LOW PEAK PERID USE) RATE T-50

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 17.09

Off-Peak All therms @ \$0.2864 per therm

Peak All therms @ \$0.2864 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of less than 5,000 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 60 Cancels M.D.T.E. No. 30 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (MEDIUM ANNUAL USE / LOW PEAK PERIOD USE) RATE T-51

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 69.43

Off-Peak All therms @ \$0.0735 per therm

Peak All therms @ \$0.1580 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of between 5,000 therms and 39,999 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Local Distribution Adjustment Clause apply to gas throughput transported under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 61 Cancels M.D.T.E. No. 31 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (EXTRA HIGH ANNUAL USE / LOW PEAK PERIOD USE) RATE T-52

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 227.53

Off-Peak All therms @ \$0.0572 per therm

Peak All therms @ \$0.1465 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage between 40,000 and 249,999 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Local Distribution Adjustment Clause apply to gas throughput transported under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 62 Cancels M.D.T.E. No. 32 First Revised Page 1 of 3

FIRM TRANSPORTATION SERVICE (EXTRA HIGH ANNUAL USE / LOW PEAK PERIOD USE) RATE T-53

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month: \$834.26

Demand Rates: Off-Peak - @ \$ 0.5843 per therm of maximum daily gas usage

Peak - @ \$ 1.8909 per therm of maximum daily gas usage

Volumetric Rates: Off-Peak - @ \$ 0.0170 per therm

Peak - @ \$ 0.0444 per therm

CALCULATION OF DEMAND CHARGES

Demand charges shall be calculated by applying the Demand Rate to the actual measured maximum daily gas usage in the billing month.

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of 250,000 therms or more and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

Section 8 (a)

M.D.T.E. No. 38 Cancels M.D.T.E. No. 5 First Revised Page 1 of 3

RESIDENTIAL NON-HEATING RESIDENTIAL RATE R-1

AVAILABILITY

Service is available under this rate at single locations for all domestic purposes, except for resale, in individual private dwellings and individual apartments including condominiums and their facilities as defined in G.L. Chapter 183A, Section 1 and DPU 86-159 dated February 6, 1987.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - BI-MONTHLY

The Bi-Monthly rate schedule applicable to all customers being served with Company meters that do <u>not</u> have an installed radio-based automated meter reading device is as follows:

Customer Charge Per Two Month Period \$ 20.62

Off-Peak All therms @ \$ 0.2721 per therm

Peak All therms @ \$ 0.2721 per therm

RATE – MONTHLY

The Monthly rate schedule applicable to all customers being served with Company meters that have an installed radio-based automated meter reading device is as follows:

Customer Charge Per One Month Period \$ 10.31

Off-Peak All therms @ \$ 0.2721 per therm

Peak All therms @ \$ 0.2721 per therm

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 39 Cancels M.D.T.E. No. 6 First Revised Page 1 of 3

LOW INCOME RESIDENTIAL NON-HEATING RESIDENTIAL RATE R-2

AVAILABILITY

Service is available under this rate at single locations for all domestic purposes, except for resale, in individual private dwellings and individual apartments to persons who verify receipt of any means-tested public-benefit program or verify eligibility for the low-income home energy assistance program or its successor program, for which eligibility does not exceed 175 percent of the federal poverty level based on a household's gross income or other criteria approved by the Department.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - BI- MONTHLY

The Bi-Monthly rate schedule applicable to all customers being served with Company meters that do <u>not</u> have an installed radio-based automated meter-reading device is as follows:

Customer Charge Per Two Month Period \$ 12.38

Off-Peak - All therms @ \$ 0.1638 per therm

Peak - All therms @ \$ 0.1638 per therm

RATE – MONTHLY

The Monthly rate schedule applicable to all customers being served with Company meters that have an installed radio-based automated meter reading device is as follows:

Customer Charge Per One Month Period \$ 6.19

Off-Peak - All therms @ \$ 0.1638 per therm

Peak - All therms @ \$ 0.1638 per therm

Issued by: Stephen H. Bryant Issued On: September 15, 2006

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M.D.T.E. No. 40 Cancels M.D.T.E. No. 7 First Revised Page 1 of 2

RESIDENTIAL HEATING RESIDENTIAL RATE R-3

AVAILABILITY

Service is available under this rate at single domestic locations for all purposes, except for resale, in individual private dwellings and individual apartments including condominiums and their facilities as defined in G. L. Chapter 183A, Section 1 and DPU 86-159 dated February 6, 1987 where such residences are heated exclusively by means of permanently installed space heating equipment.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 10.31

Off-Peak All therms @ \$ 0.2779 per therm

Peak All therms @ \$ 0.2779 per therm

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

COST OF GAS ADJUSTMENT AND LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Cost of Gas Adjustment and Local Distribution Adjustment Clause apply to gas sold under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 41 Cancels M.D.T.E. No. 8 First Revised Page 1 of 3

LOW INCOME RESIDENTIAL HEATING RESIDENTIAL RATE R-4

AVAILABILITY

Service is available under this rate at single domestic locations for all purposes, except for resale, in individual private dwellings and individual apartments where such residences are heated exclusively by means of permanently attached space heating equipment to persons who verify receipt of any means-tested public-benefit program or verify eligibility for the low-income home energy assistance program or its successor program, for which eligibility does not exceed 175 percent of the federal poverty level based on a household's gross income or other criteria approved by the Department..

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 5.88

Off-Peak All therms @ \$ 0.1584 per therm

Peak All therms @ \$ 0.1584 per therm

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

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M.D.T.E. No. 42 Cancels M.D.T.E. No. 9 First Revised Page 1 of 2

COMMERCIAL AND INDUSTRIAL SERVICE (LOW ANNUAL USE / HIGH PEAK PERIOD USE) RATE G-40

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 16.50

Off-Peak All therms @ \$0.2936 per therm

Peak All therms @ \$0.2936 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of less than 5,000 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 43 Cancels M.D.T.E. No. 10 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (MEDIUM ANNUAL USE / HIGH PEAK PERIOD USE) RATE G-41

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 67.04

Off-Peak All therms @ \$0.1030 per therm

Peak All therms @ \$0.1625 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of between 5,000 therms and 39,999 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 44 Cancels M.D.T.E. No. 11 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (HIGH ANNUAL USE / HIGH PEAK PERIOD) RATE G-42

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 219.69

Off-Peak All therms @ \$0.0660 per therm

Peak All therms @ \$0.1512 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage between 40,000 and 249,999 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures. With the exception that customers whose annual use is greater than 249,999 therms, and if the Company has been unable to install an Automated Meter Reading Device, such customers also shall take service under this rate schedule.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 45 Cancels M.D.T.E. No. 12 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (EXTRA HIGH ANNUAL USE / HIGH PEAK PERIOD USE) RATE G-43

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month: \$805.52

Demand Rates: Off-Peak - @ \$ 0.5623 per therm of maximum daily gas

usage

Peak - @ \$ 1.8197 per therm of maximum daily gas

usage

Volumetric Rates: Off-Peak - @ \$0.0164 per therm

Peak - @ \$0.0427 per therm

CALCULATION OF DEMAND CHARGES

Demand charges shall be calculated by applying the Demand Rate to the actual measured maximum daily gas usage in the billing month.

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of 250,000 therms or more and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

Issued by: Stephen H. Bryant Issued On: Se[tember 15, 2006

M.D.T.E. No. 46 Cancels M.D.T.E. No. 13 First Revised Page 1 of 2

COMMERCIAL AND INDUSTRIAL SERVICE (LOW ANNUAL USE / LOW PEAK PERIOD USE) RATE G-50

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 16.50

Off-Peak All therms @ \$0.2764 per therm

Peak All therms @ \$0.2764 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of less than 5,000 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 47 Cancels M.D.T.E. No. 14 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (MEDIUM ANNUAL USE / LOW PEAK PERIOD USE) RATE G-51

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 67.04

Off-Peak All therms @ \$0.0709 per therm

Peak All therms @ \$0.1525 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of between 5,000 and 39,999 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 48 Cancels M.D.T.E. No. 15 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (HIGH ANNUAL USE / LOW PEAK PERIOD USE) RATE G-52

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 219.69

Off-Peak All therms @ \$0.0552 per therm

Peak All therms @ \$0.1414 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage between 40,000 and 249,999 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures. With the exception that customers whose annual use is greater than 249,999 therms, and if the Company has been unable to install an Automated Meter Reading Device, such customers also shall take service under this rate schedule.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 49 Cancels M.D.T.E. No. 16 First Revised Page 1 of 3

COMMERCIAL AND INDUSTRIAL SERVICE (EXTRA HIGH ANNUAL USE / LOW PEAK PERIOD USE) RATE G-53

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month: \$805.52

Demand Rates: Off-Peak - @ \$ 0.5640 per therm of maximum daily gas usage

Peak - @ \$ 1.8254 per therm of maximum daily gas usage

Volumetric Rates: Off-Peak - @ \$ 0.0164 per therm

Peak - @ \$ 0.0429 per therm

CALCULATION OF DEMAND CHARGES

Demand charges shall be calculated by applying the Demand Rate to the actual measured maximum daily gas usage in the billing month.

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of 250,000 therms or more and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 50 Cancels M.D.T.E. No. 17 First Revised Page 1 of 2

OUTDOOR GAS LIGHTING SERVICE RATE L

AVAILABILITY

Service to all customers is available under this rate for outdoor gas lighting where a standard gas light is attached to the Company's existing distribution system, and when it is not feasible to meter gas for such lighting along with other gas used on the premises and bill the same under the rate in effect for all other service. All such installations shall be on private property. Service under this schedule is available only to those customers taking service under this rate as of December 14, 1979.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

\$ 2.24 per month per light.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

COST OF GAS ADJUSTMENT AND LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Cost of Gas Adjustment and Local Distribution Adjustment Clause apply to gas sold under this rate.

TERM OF CONTRACT

The terms of contract under this schedule shall be for an initial period of one year, and shall continue in effect thereafter until canceled by either party on 30 days' written notice.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 51 Cancels M.D.T.E. No. 21 First Revised Page 1 of 3

NON-HEATING FIRM TRANSPORTATION SERVICE RESIDENTIAL RATE T-R1

AVAILABILITY

Service is available under this rate at single domestic locations throughout the territory served by the Company for transportation of supplier-owned gas used in individual private dwellings and individual apartments including condominiums and their facilities as defined in G. L. Chapter 183A, Section 1 and DPU 86-159 dated February 6, 1987.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - BI-MONTHLY

The Bi-Monthly rate schedule applicable to all customers being served with Company meters that do <u>not</u> have an installed radio-based automated meter reading device is as follows:

Customer Charge Per Two Month Period \$ 20.62

Off-Peak - All therms @ \$0.2721 per therm

Peak - All therms @ \$0.2721 per therm

RATE – MONTHLY

The Monthly rate schedule applicable to all customers being served with Company meters that have an installed radio-based automated meter reading device is as follows:

Customer Charge Per One Month Period \$ 10.31

Off-Peak - All therms @ \$0.2721 per therm

Peak - All therms @ \$0.2721 per therm

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 52 Cancels M.D.T.E. No. 22 First Revised Page 1 of 3

LOW INCOME NON-HEATING FIRM TRANSPORTATION SERVICE RESIDENTIAL RATE T-R2

AVAILABILITY

Service is available under this rate at single domestic locations throughout the territory served by the Company for transportation of supplier-owned gas used in individual private dwellings and individual apartments for all domestic purposes to persons who verify receipt of any means-tested public-benefit program or verify eligibility for the low-income home energy assistance program or its successor program, for which eligibility does not exceed 175 percent of the federal poverty level based on a household's gross income or other criteria approved by the Department..

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - BI-MONTHLY

The Bi-Monthly rate schedule applicable to all customers being served with Company meters that do <u>not</u> have an installed radio-based automated meter reading device is as follows:

Customer Charge Per Two Month Period \$ 12.38

Off-Peak All therms @ \$0.1638per therm

Peak All therms @ \$0.1638 per therm

RATE – MONTHLY

The Monthly rate schedule applicable to all customers being served with Company meters that have an installed radio-based automated meter reading device is as follows:

Customer Charge Per One Month Period \$ 6.19

Off-Peak All therms @ \$ 0.1638 per therm

Peak All therms @ \$0.1638 per therm

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 53 Cancels M.D.T.E. No. 23 First Revised Page 1 of 3

HEATING FIRM TRANSPORTATION SERVICE RESIDENTIAL RATE T-R3

AVAILABILITY

Service is available under this rate at single domestic locations throughout the territory served by the Company for transportation of supplier-owned gas used in individual private dwellings and individual apartments including condominiums and their facilities as defined in G. L. Chapter 183A, Section 1 and DPU 86-159 dated February 6, 1987 where such residences are heated exclusively by means of permanently installed space heating equipment.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 10.31

Off-Peak - All therms @ 0.2779 per therm

Peak - All therms @ 0.2779 per therm

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Local Distribution Adjustment Clause apply to gas transported under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 54 Cancels M.D.T.E. No. 24 First Revised Page 1 of 2

LOW INCOME HEATING FIRM TRANSPORTATION SERVICE RESIDENTIAL RATE T-R4

AVAILABILITY

Service is available under this rate at single domestic locations throughout the territory served by the Company to persons who verify receipt of any means-tested public-benefit program or verify eligibility for the low-income home energy assistance program or its successor program, for which eligibility does not exceed 175 percent of the federal poverty level based on a household's gross income or other criteria approved by the Department, for transportation of supplier-owned gas used in individual private dwellings and individual apartments where such residences are heated exclusively by means of permanently installed space heating equipment.

CHARACTER OF SERVICE

A continuous supply of gas of not less than 1,000 Btu per cubic foot.

RATE - MONTHLY

Customer Charge Per Month \$ 5.88

Off-Peak All therms @ 0.1584 per therm

Peak All therms @ 0.1584 per therm

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 55 Cancels M.D.T.E. No. 25 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (LOW ANNUAL USE / HIGH PEAK PERIOD USE) RATE T-40

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 16.50

Off-Peak All therms @ \$0.2936 per therm

Peak All therms @ \$0.2936 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of less than 5,000 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 9, 2006

M.D.T.E. No. 56 Cancels M.D.T.E. No. 26 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (MEDIUM ANNUAL USE / HIGH PEAK PERIOD USE) RATE T-41

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 67.04

Off-Peak All therms @ \$0.1030 per therm

Peak All therms @ \$0.1625 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of between 5,000 therms and 39,999 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Local Distribution Adjustment Clause apply to gas throughput transported under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 57 Cancels M.D.T.E. No. 27 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (HIGH ANNUAL USE / HIGH PEAK PERIOD USE) RATE T-42

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 219.69

Off-Peak All therms @ \$0.0660 per therm

Peak All therms @ \$0.1521 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage between 40,000 and 249,999 therms and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Local Distribution Adjustment Clause apply to gas throughput transported under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 58 Cancels M.D.T.E. No. 28 First Revised Page 1 of 3

FIRM TRANSPORTATION SERVICE (EXTRA HIGH ANNUAL USE / HIGH PEAK PERIOD USE) RATE T-43

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month: \$805.52

Demand Rates: Off-Peak @ \$ 0.5623 per therm of maximum daily gas usage

Peak @ \$ 1.8197 per therm of maximum daily gas usage

Volumetric Rates: Off-Peak @ \$ 0.0164 per therm

Peak @ \$ 0.0427 per therm

CALCULATION OF DEMAND CHARGES

Demand charges shall be calculated by applying the Demand Rate to the actual measured maximum daily gas usage in the billing month.

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of 250,000 therms or more and peak period usage greater than or equal to 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 59 Cancels M.D.T.E. No. 29 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (LOW ANNUAL USE / LOW PEAK PERID USE) RATE T-50

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 16.50

Off-Peak All therms @ \$0.2764 per therm

Peak All therms @ \$0.2764 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of less than 5,000 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 60 Cancels M.D.T.E. No. 30 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (MEDIUM ANNUAL USE / LOW PEAK PERIOD USE) RATE T-51

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 67.04

Off-Peak All therms @ \$0.0709 per therm

Peak All therms @ \$0.1525 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage of between 5,000 therms and 39,999 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Local Distribution Adjustment Clause apply to gas throughput transported under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 61 Cancels M.D.T.E. No. 31 First Revised Page 1 of 2

FIRM TRANSPORTATION SERVICE (EXTRA HIGH ANNUAL USE / LOW PEAK PERIOD USE) RATE T-52

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month \$ 219.69

Off-Peak All therms @ \$0.0552 per therm

Peak All therms @ \$0.1414 per therm

CHARACTERISTICS OF CUSTOMER

A customer receiving service under this schedule must have annual usage between 40,000 and 249,999 therms and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

PERFORMANCE-BASED REGULATION ("PBR") PLAN ANNUAL ADJUSTMENT

The rates set forth in this Rate Schedule are subject to adjustment each year pursuant to the Company's PBR Plan approved by the Department's Order in D.T.E. 05-27.

LOCAL DISTRIBUTION ADJUSTMENT CLAUSE

The provisions of the Company's Local Distribution Adjustment Clause apply to gas throughput transported under this rate.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

M.D.T.E. No. 62 Cancels M.D.T.E. No. 32 First Revised Page 1 of 3

FIRM TRANSPORTATION SERVICE (EXTRA HIGH ANNUAL USE / LOW PEAK PERIOD USE) RATE T-53

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company for transportation of customer-owned gas used for commercial, industrial, or institutional purposes.

RATE - MONTHLY

Customer Charge Per Month: \$805.52

Demand Rates: Off-Peak - @ \$ 0.5640 per therm of maximum daily gas usage

Peak - @ \$ 1.8254 per therm of maximum daily gas usage

Volumetric Rates: Off-Peak - @ \$ 0.0164 per therm

Peak - @ \$ 0.0429 per therm

CALCULATION OF DEMAND CHARGES

Demand charges shall be calculated by applying the Demand Rate to the actual measured maximum daily gas usage in the billing month.

CHARACTERISTICS OF CUSTOMER

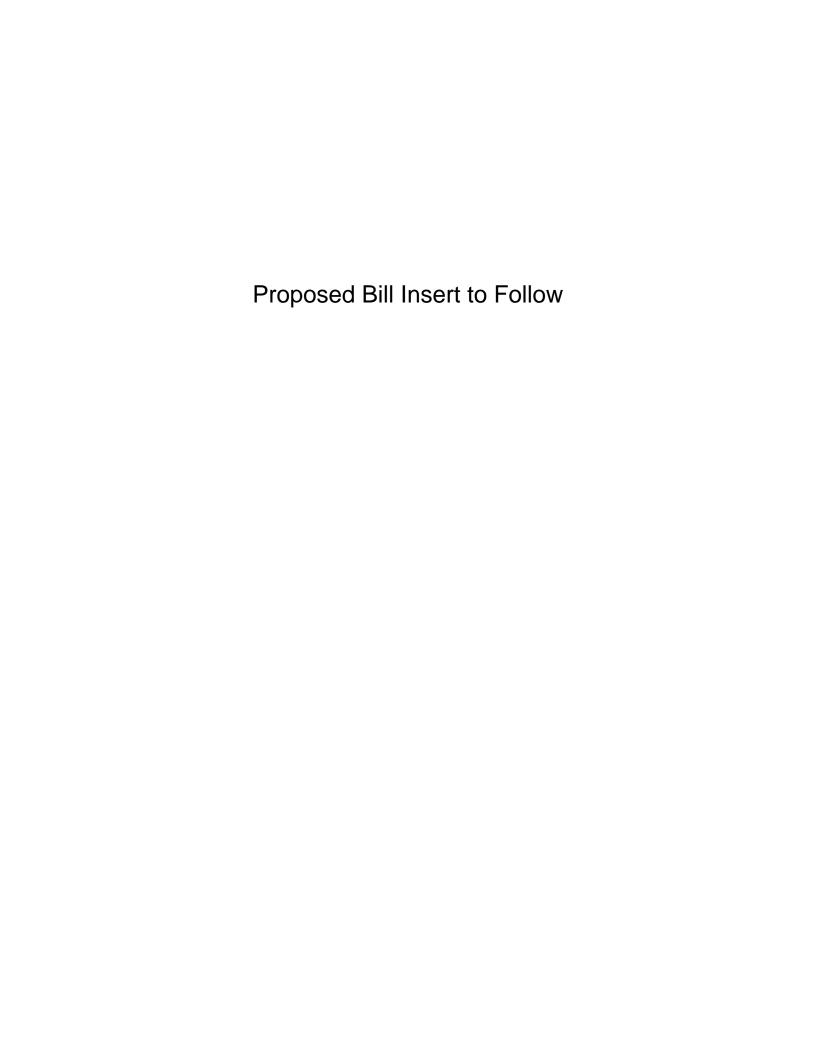
A customer receiving service under this schedule must have annual usage of 250,000 therms or more and peak period usage less than 70 percent of annual use as determined by Company records and procedures.

MINIMUM CHARGE

The minimum charge per month shall be the sum of the monthly Customer Charge and the Residential and Commercial Energy Conservation Service ("RCS") Charge.

Issued by: Stephen H. Bryant Issued On: September 15, 2006

Section 9



PART B

Section 1

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

)	
)	D.T.E. 06
BAY STATE GAS COMPANY)	
)	
)	

PETITION OF BAY STATE GAS COMPANY FOR AUTHORITY TO RECOVER EXOGENOUS COST ASSOCIATED WITH MATERIALLY DECLINING AVERAGE USE PER CUSTOMER

Pursuant to G.L. c. 164, § 76 and <u>Bay State Gas Company</u>, D.T.E. 05-27 (2005), Bay State Gas Company ("Bay State" or the "Company") hereby petitions the Department of Telecommunications and Energy ("the Department") for authority to recover exogenous costs associated with materially declining average use per customer ("AUPC"). In support of its request, Bay State states the following:

- 1. Bay State is a Massachusetts gas company and public utility primarily engaged in supply and transportation of natural gas.
- 2. On April 27, 2005, Bay State filed with the Department a request for approval of a Performance Based Rate Plan ("PBR") and for base rate relief. Bay State's request was docketed as D.T.E. 05-27.
- 3. On November 30, 2006, the Department approved the PBR for a 10-year term and granted Bay State base rate relief. See, Bay State Gas Company, D.T.E. 05-27, at 381, 443 (2005).

- 4. As part of its approval of the PBR, the Department allowed for Bay State to propose recovery of exogenous cost changes amounting to \$600,000 or more in any particular calendar year. D.T.E. 05-27, at 395.
- 5. The Department has reviewed the recovery of exogenous costs in many different settings since its first approval of the mechanism in 1996. Boston Gas Company, D.T.E. 96-50 (Phase I), at 292 (1996); Bay State Gas Company, D.T.E. 98-31, at 17 (1998); Essex Gas Merger, D.T.E. 98-27, at 19 (1998); Joint Petition of Eastern Enterprises and Colonial Gas Company, D.T.E. 98-128, at 54-55 (1998); Berkshire Gas Company, D.T.E. 01-56, at 25 (2001); Boston Gas Company, D.T.E. 03-40, at 488-492 (2003); Bay State Gas Company, D.T.E. 05-27, at 394-396 (2005); Boston Gas Company, D.T.E. 05-66 (2005).
- 6. Exogenous cost recovery may be granted when the proponent demonstrates that the cost is (1) beyond the company's control; and (2) not reflected in the GDP-PI. <u>Bay State Gas</u>

 <u>Company</u>, D.T.E. 05-27, at 395.
- 7. Materially declining average use per customer results from events which are beyond Bay State's control and which uniquely impact natural gas utilities. The cost of this event has a significant dollar impact on Bay State's operations.
- 8. The amount for which Bay State seeks authority to recover exceeds the \$600,000 annual threshold associated with exogenous factors established in D.T.E. 05-27. <u>Bay State Gas</u>

 <u>Company</u>, D.T.E. 05-27, at 396.

WHEREFORE, Bay State Gas Company respectfully requests that the Department grant its request to recover the cost of material declining average use per customer as an exogenous factor through the Local Distribution Adjustment Clause and grant such other relief as may be

appropriate.

Respectfully submitted,

BAY STATE GAS COMPANY

By its Attorneys,

Patricia M. French Senior Attorney NISOURCE CORPORATE SERVICES 300 Friberg Parkway Westborough, MA 01581 (508) 836-7394 fax (508) 836-7039

Robert L. Dewees, Jr. NIXON PEABODY LLP 100 Summer Street Boston, MA 02110 (617) 345-1000 fax (866) 947-1870

Dated: September 15, 2006

Section 2

I. INTRODUCTION

1

- 2 Q. Please state your name and business address.
- 3 A. My name is Lawrence R. Kaufmann. My business address is 22 East Mifflin,
- 4 Suite 302, Madison, Wisconsin 53705.

5 Q. What is your position and what are your responsibilities?

- 6 A. I am a Partner at Pacific Economics Group LLC ("PEG"). My work includes
- 7 designing and providing empirical support on performance-based regulation
- 8 ("PBR") plans for energy utility clients. My specific duties include designing
- 9 regulatory plans that create strong performance incentives, supervising research
- on the productivity and input price trends of utility industries, benchmarking
- 11 utility cost performance, and expert witness testimony. I have been involved in
- PBR-related projects for a large number of gas and electric utility clients.

13 Q. What is your professional and educational background?

- 14 A. Prior to co-founding the Madison office of PEG in 1998, I was employed from
- 15 1993 until 1998 as a Senior Economist at Christensen Associates, an economic
- 16 consulting firm based in Madison. I received a PhD in Economics from the
- 17 University of Wisconsin in 1993.

18 Q. Have you previously testified before the Department of Telecommunications

- 19 and Energy?
- 20 A. Yes. I filed both direct and rebuttal testimony on the PBR plan proposed by Bay
- 21 State Gas in D.T.E. 05-27 and by Boston Gas Company in D.T.E. 03-40. I also
- co-authored a report that was attached to testimony on service quality PBR in

1 Massachusetts (D.T.E. 99-84) and testified before the Department in that 2 proceeding. 3 Q. **Have you testified before other Commissions?** 4 A. Yes. I have filed testimony on PBR issues in Rhode Island, Kansas, Hawaii, 5 Oklahoma, and Kentucky. I have co-authored reports that were attached to PBR 6 testimony in California and British Columbia. I have also testified overseas in 7 Australia and New Zealand on PBR issues. 8 O. What is the purpose of this Testimony? 9 A. This testimony will address Bay State Gas Company's ("Bay State" or the 10 "Company") proposal to recover revenues that have been lost due to the decline in average gas use per customer (AUPC). This testimony supports Bay State's 11 12 proposal to recover these revenues through the exogenous factor component of its 13 Department-approved PBR plan. 14 Q. Can you summarize your conclusions? 15 A. Yes. There has been a long-term trend of declining AUPC in the natural gas 16 industry. Since 2002 this trend has accelerated, as consumption has fallen in 17 response to the rapid increase in natural gas prices. The acceleration in declining 18 AUPC has been particularly dramatic for gas distributors in the Northeast US. 19 Both the longer-term trend, and the recent acceleration, of declining AUPC are 20 exogenous events which are beyond the control of utility managers and reflect

circumstances that uniquely affect the natural gas industry.

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The Department recently addressed the issue of exogenous cost increases resulting from higher natural gas prices in D.T.E. 05-66. In that proceeding, the Department concluded that the recent increase in bad debt expense for Boston Gas Company could be recovered through the exogenous factor in that company's PBR plan. I have carefully reviewed the rationale which the Department used in D.T.E. 05-66 to justify exogenous recovery of bad debt expense, and I believe it applies even more strongly to Bay State's proposed recovery of revenues that have been lost due to declining AUPC. I therefore believe that Bay State's proposal to recover revenues lost because of an exogenous decline in gas usage is consistent with Department precedent and should be allowed.

11 Q. How is the Testimony organized?

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12 A. Following this introduction, the testimony is organized in three sections. Section
13 II discusses the issue of declining AUPC in the natural gas industry and shows
14 that this decline has accelerated since 2002, particularly in the Northeast U.S.
15 Section III discusses the criteria that the Department developed in D.T.E. 05-66
16 for allowing exogenous cost recovery and evaluates whether those criteria are
17 satisfied with respect to Bay State's proposed recovery of lost revenues due to
18 declining AUPC. Section IV presents concluding remarks.

19 II. NATURAL GAS USAGE AND REVENUE TRENDS

20 Q. What has been the recent experience in natural gas usage per customer?

1 Α. For many US gas distributors, there has been a long-term trend of declining gas 2 delivery volumes per customer. This pattern is particularly evident for residential 3 customers. For example, one study by the American Gas Association (AGA) 4 estimates that gas consumption per household has declined by 22% since 1980 in 5 weather-normalized terms. This trend is due, in part, to demand-side management 6 programs, but it also depends greatly on the use of more energy efficient 7 appliances, materials and insulation in new construction. All these factors tend to 8 reduce gas consumption per customer, on average. 9 Q. Do gas utilities tend to serve increasing numbers of customers over time? 10 A. Yes. Nearly all gas distributors are experiencing growth in their service territories 11 and, therefore, in their obligation to connect and serve new natural gas customers. 12 Q. If a gas distributor is serving increasing customer numbers, and average gas 13 usage per customer is declining, what are the implications for that 14 distributor's costs and revenues? 15 A. For most gas distributors, if customer numbers are increasing and average use per 16 customer (AUPC) is declining, the changes in a distributor's revenues will tend to 17 lag the changes in its gas distribution costs. This results from the fact that there is 18 an imbalance between gas distribution costs and the design of gas distribution 19 rates. 20 This issue can be better understood by considering the structure of gas distribution 21 costs and revenues. Most gas distribution costs (e.g., services, meters, and new distribution main) are largely fixed and driven by the number of customers served. At the same time, most distributors' rates are designed so that more revenues are generated from volumetric, rather than customer charges. This mismatch between gas distributors' cost structure and rate design becomes problematic when customer numbers increase but volumes per customer decline. All else equal, the combination of increasing customer numbers, declining AUPC, and a volumetric-intensive rate design will cause revenue growth to lag cost growth.

Q. Has the recent increase in natural gas prices affected these trends?

A. Yes. These problems have been exacerbated by the recent increases in natural gas commodity prices. Many customers react to higher gas commodity prices by reducing their natural gas consumption. This accentuates the trend of declining usage per customer. This, in turn, further reduces gas distribution revenues, which depend on throughput. Since gas distribution costs remain largely fixed, distributors' returns are negatively impacted by higher commodity prices.

Q. Are there data that demonstrate that gas usage per customer has been impacted by the recent increase in natural gas prices?

A. Yes. Exhibit LRK-1 is a table I prepared on trends in average gas use for residential and commercial gas customers in the US. Data is presented for the 1997-2005 period and for the two sub-periods of 1997-2002 and 2002-2005. I have examined trends before and after 2002 since, beginning in that year, annual

natural gas prices have generally increased steadily. The table presents data on both the "normalized" and "non-normalized" change in gas usage per annum for residential and commercial customers. Non-normalized usage is simply equal to total consumption for residential and commercial customers. "Normalized" usage has been adjusted for weather, using a regression that relates residential and commercial natural gas consumption to heating degree days. Data are presented for each State in the continental U.S. and for six regional aggregates: Northeast; the Southeast; the North Central; the South Central; the Northwest; and the Southwest. The normalized data are more useful than non-normalized data for evaluating underlying consumption patterns since the latter depend greatly on transitory and unpredictable weather conditions. I will therefore confine my testimony to the normalized AUPC data. For the U.S. as a whole, gas usage per residential and commercial customers declined by an average of 1.58% per annum over the 1997-2005 period. The trend decline in AUPC was 1.5% per annum from 1997 to 2002. This declining trend accelerated to 1.74% per annum in the 2002-2005 period. The figures are even more striking for the Northeast region. For Northeast gas distributors, AUPC declined at a 0.43% rate from 1997 to 2002. In the 2002-2005 period, AUPC declined by 2% per annum. No other U.S. region experienced an acceleration of this magnitude during the 2002-2005 period, when natural gas prices were generally increasing.

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Q. Are these trends the result of exogenous factors that are beyond the control 2 of gas distribution managers? 3 A. Yes. The long-term trend in AUPC stems primarily from changes in construction 4 materials and more energy efficient appliances which reduce households' demand 5 for natural gas. The acceleration of this trend was due to the increase in natural 6 gas prices in recent years. Gas distributors obviously have no control over new 7 construction in their territories, but must still connect and provide service to new 8 homes and businesses that typically use less natural gas than existing customers. 9 Distributors also have no control over commodity prices for natural gas and, in

Massachusetts, distributors do not profit from the natural gas supplies that they

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12 Q. Do these trends uniquely affect the local gas distribution industry?

procure on behalf of customers.

13 A. Yes. Gas distributors are monopoly providers of gas delivery services to end 14 users in their service territory and have an obligation to serve a growing customer 15 This is largely a fixed cost business. When the number of customers 16 increases and AUPC declines, the change in gas distribution costs will outpace the 17 change in distribution revenues, all else equal. This disparity will be exacerbated 18 by increases in natural gas commodity prices that tend to depress AUPC further. 19 This mismatch between changes in costs and changes in revenues results from a 20 constellation of factors which are unique and inherent to the gas distribution 21 industry – most importantly, the structure of gas distribution costs, the design of

1 gas distribution rates, the obligation to serve a growing number of customers, and 2 the exogenous decline in AUPC over time. 3 Q. Based on this information, what do you conclude? 4 A. I conclude that there has been a consistent decline in average natural gas usage for 5 residential and commercial customers. This decline has accelerated in recent 6 years due to the increase in gas commodity prices, and the accelerated decline has 7 been particularly sharp for Northeastern gas distributors. The effect of declining 8 AUPC is to cause revenue changes to lag cost changes, thereby adversely 9 impacting gas distributors' earnings. These trends are also exogenous in the sense 10 that they are beyond the control of gas distribution managers, and they uniquely 11 affect the local gas distribution industry. 12 III. EXOGENOUS RECOVERY OF BAD DEBT EXPENSE AND REVENUES LOST TO DECLINING USE PER CUSTOMER 13 14 Q. Has the Department recently considered the issue of exogenous recovery of 15 expenses that resulted from higher natural gas commodity prices? 16 A. Yes. The Department considered this issue in D.T.E. 05-66, where Boston Gas 17 filed for the recovery of an increase in its bad debt expense stemming from the 18 recent increase in gas commodity prices. 19 Q. Please summarize this filing and the outcome of the proceeding. 20 A. In D.T.E. 05-66, Boston Gas argued that \$9,381,629 in its under-recovered bad 21 debt expense met the Department's standard for exogenous cost recovery and

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should be recovered through the exogenous factor in its approved PBR plan. The company claimed this was justified because 1) the increase in bad debt expense resulted from higher gas commodity prices over which Boston Gas had no control; 2) the higher bad debt expense resulted from changes in the natural gas marketplace that uniquely affect the natural gas industry; and 3) the increase in bad debt expenses were not captured in the GDP-PI. The Department agreed with Boston Gas's claim that the increase in its bad debt expense was due to unprecedented increases in gas commodity prices. Department also found that the impact of higher gas prices on gas-related bad debt expense, and on the ability of distributors to recover such expenses, is unique to the local gas distribution industry because distributors must purchase gas for customers they are obligated to serve. The Department also agreed that the cost changes associated with higher natural gas prices are not included in the GDP-PI as applied in Boston Gas's PBR plan. At the same time, the Department said that cost changes associated with natural gas market conditions that uniquely affect the local gas distribution industry and are beyond company control should not be construed as automatic grounds for exogenous recovery. The Department allowed Boston Gas to recover gas-related bad debt expense as an exogenous cost because: 1) it was under a PBR plan and could not file a rate case to recover the costs; 2) the cost change is significantly

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2 cost change is not included in the GDP-PI. 3 Furthermore, the Department ruled that there was "a larger question involved 4 here, larger than the working of regulatory formulas" (D.T.E. 05-66 at 15). Gas 5 distributors have an obligation to serve customers, and they are constitutionally 6 guaranteed the opportunity, given efficient management, to recover costs that are 7 reasonably and necessarily incurred to serve customers. This opportunity is 8 necessary for companies to maintain financial integrity and attract capital which, 9 in turn, is necessary to continue providing service to new and existing customers. 10 It would not be consistent with distributors' constitutional guarantees to deny cost 11 recovery, thereby harming a company's financial integrity, because of factors that 12 are largely beyond that company's control. 13 Q. Do you believe that Bay State's proposal to recover lost revenues through the 14 exogenous factor is consistent with the criteria the Department developed in 15 D.T.E. 05-66 for the recovery of exogenous events? 16 A. Yes. The loss of Bay State revenues due to the decline in its AUPC is: 1) beyond 17 the Company's control; 2) results from factors that uniquely affect the gas 18 distribution industry; and 3) not captured in the GDP-PI. In my opinion, these 19 conditions are satisfied more strongly and unambiguously than in the case of bad 20 debt expense, for which the Department allowed exogenous recovery in D.T.E. 21 05-66. In addition, like Boston Gas in that proceeding, Bay State is subject to a

associated with a pass-through item (i.e. natural gas purchase costs); and 4) the

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10 year PBR plan and cannot file a rate case to recover the costs; the exogenous event results from a cost pass through item; and the revenues in question are below those approved in Bay State's last rate case. Given that Bay State is under a 10 year rather than five year PBR plan, it is all the more important that the Department recognize declining AUPC as an exogenous factor in Bay State's PBR.

7 Q. Please explain why the loss in revenue is beyond company control.

A.

In the most general terms, while gas distributors have an obligation to provide delivery services to customers in their service territory, they have little ability to influence the volume of natural gas that is actually delivered to customers. Delivery volumes are ultimately determined by customers' demands. Gas distributors are obligated to deliver whatever volume of natural gas that their customers demand.

In recent years, the demand for natural gas has been negatively impacted by higher prices for the natural gas commodity. The negative impact of higher gas prices on gas usage for residential and commercial customers has been particularly evident in the Northeastern U.S., as demonstrated by Exhibit LRK-1. Therefore, the precipitating factor in Bay State's recent decline in AUPC, and its associated loss of revenues, is the increase in gas commodity prices. This is the same factor that the Department identified as being responsible for the increase in

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1 bad debt expenses for Boston Gas, for which the Department allowed exogenous 2 recovery in D.T.E. 05-66. 3 Q. Do you believe the linkage between higher gas prices and lower delivery 4 volumes is stronger than the link between higher gas prices and increased 5 bad debt expense? 6 A. I do, for several reasons. First, it is matter of fundamental economic theory that 7 higher prices for a good or service lead to a decline in the quantity demanded of 8 that good or service. Because it is a cost pass through item, Bay State can do 9 nothing to mitigate the impact of higher prices in the natural gas marketplace on 10 the prices that are charged for natural gas to its customers. Accordingly, there is a 11 direct and unavoidable linkage between changes in the market prices for natural 12 gas and Bay State's delivery volumes. 13 In contrast, the link between natural gas prices and bad debt expense is both more 14 indirect and more manageable. Unlike the close and inexorable link between 15 prices and the quantities that consumers demand, gas prices and bad debt expense 16 are connected through a longer chain of activities. Gas distributors first purchase 17 natural gas on customers' behalf, bill them for the quantities they consume, and 18 observe that customers fail to pay their bills in full before contacting these 19 customers and attempting to arrange for final payment. Only after the latter steps 20 fail to eliminate arrearages are debt expenses considered to be "bad" and written 21 off. Thus, while there is likely to be a link between changes in gas commodity prices and bad debt expense, this relationship only becomes manifest through a series of interactions between the distributor and its customers that unfolds over a considerable period of time.

Relatedly, because high gas prices are linked to bad debt expense via a series of distributor activities, gas distributors have some ability to manage this relationship. Billing and collecting from customers are normal, ongoing business activities that companies can control, *inter alia*, through their own collection efforts. A distributor's ability to plan for and manage bad debt expense may also be heightened by the fact that high gas prices are generally observable in advance of the winter heating season, and managers can foresee that higher prices will affect customers' ability to pay their bills during the peak winter months.

The nature of the linkage between gas prices and the quantity of gas demanded is very different. This relationship depends almost entirely on customers', as opposed to the utility's, behavior. Indeed, the relationship between prices and quantities demanded is captured in the market demand curve, which is one of the fundamental building blocks of economic analysis. The demand curve is also distinct from the supply curve, which reflects producers' behavior in the marketplace. When natural gas prices increase, consumers naturally respond by reducing their consumption. Distributors have little ability to "manage" or offset this response. On the contrary, they have an obligation to deliver whatever volumes of gas their customers' demand.

1 Q. Please explain why the loss in revenue due to declining usage uniquely affects 2 the local gas distribution industry. 3 A. Gas distributors have a unique obligation to provide natural gas delivery service 4 to customers in their service territory. In Massachusetts, distributors do not profit from this service but sell gas at cost to customers. However, declining gas usage 5 6 does reduce distributors' revenues, which depend on throughput. Declining usage 7 also tends to impact distributor earnings negatively because gas distribution is a 8 largely fixed cost business, so most distribution costs do not fall when customers' 9 usage falls. 10 In contrast, other sectors of the natural gas industry are less adversely affected 11 than gas distributors when commodity prices rise and gas usage declines. Gas 12 producers actually stand to benefit financially when natural gas prices increase. 13 Gas pipelines are largely indifferent to the amount of gas delivered to end users 14 since their tariffs are designed on a "straight fixed variable" basis that reflects the 15 cost structure of the pipeline industry. Essentially, pipelines' fixed costs are 16 recovered through charges that do not depend on the volumes of gas delivered 17 through the pipelines. Only pipelines' variable costs are recovered through 18 Accordingly, pipelines revenues and earnings are less volumetric charges. 19 sensitive to volumes delivered than is the case for gas distributors.

Do you believe the impact of higher gas prices on volumes is more unique to

the gas distribution industry than the impact of bad debt expense?

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Q.

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- 1 A. Yes, I do. Again, one reason is that the linkage between volumes and prices is
 2 direct and specific to the natural gas industry. The link between gas prices and
 3 bad debt expense is indirect at best.
- I also believe that high gas prices can be expected to lead to revenue collection problems for businesses other than gas distributors. I believe it is much less likely that high gas prices will lead to material, observable declines in the consumption of other goods and services in the economy. Therefore, the "spillover" effects into other economic sectors due to higher gas commodity prices is likely to be greater with respect to revenue collection and bad debt expense than with respect to the volumes of goods or services demanded.

Q. Please explain.

A.

Because utility services are essential – and there is a possibility that service will be terminated at some point for failure to pay – many customers are likely to prioritize their gas bills. If these customers have trouble making ends meet, they can pay for nearly any other product in the marketplace using credit card debt. The attempt to manage gas expenses could therefore lead to greater indebtedness more generally and thus spillover credit problems and bad debt expense. This interaction between managing utility and other living expenses for fixed income and low income people sometimes receives media attention and is referred to as the "heating or eating" dilemma.

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Compared with bad debt expense, there will be less spillover impact from higher gas prices on consumption and sales volumes in the broader economy. One reason is that consumers can and will partially manage the impact of higher prices on their overall consumption through debt. In the short run, increasing indebtedness naturally reduces the impact that higher prices for a single product would otherwise have on consumption more generally.

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In addition, customers consume a wide range of goods and services, and the impact of higher prices for a single service like natural gas will have a second order, and less pronounced, impact on the consumption of other goods or services in the marketplace. Economists separate the impact of a price increase on the consumption of different goods and services into two effects: the "substitution effect" and the "income effect." The substitution effect captures the impact that price increases for a given product have on the consumption of that product itself. The substitution effect is always negative, meaning that when the price of an individual product increases customers always respond by substituting their consumption away from that product. The income effect captures the indirect impact of price increases on the demand for goods and services due to the reduction in consumers' overall purchasing power. The income effect can be positive or negative depending on the nature of the good or service. In evaluating the impact of higher natural gas prices on consumers' demand, the substitution effect will apply only to natural gas usage and will be negative. The income

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effects will be spread throughout all the other goods and services that customers purchase and, as noted, may be either negative or positive. It follows that the substitution effect from higher gas prices can be expected to dominate any income effects, and natural gas volumes will be far more impacted by higher gas prices than the consumption volumes of any other good or service.

A.

Q. Does the proposed recovery of revenue losses through the exogenous factor satisfy the Department's criteria that the change in question not be included in the GDP-PI?

Yes. Bay State's recent decline in gas usage, and the associated loss of revenues, stems from higher gas commodity prices. This is identical to the Department's finding in D.T.E. 05-66 that Boston Gas's higher bad debt expense resulted from the unprecedented increase in gas commodity prices. In D.T.E. 05-66, the Department concluded that "cost changes associated with increases in the price of natural gas are not included in the GDP-PI as it relates to Boston Gas's plan. Also, Boston Gas's PBR plan applies only to base rates, and not to its CGAC. Therefore, the Company cannot double-recover gas-related bad debt expenses" (D.T.E. 05-66 at 12). Because Bay State's PBR plan also applies to base rates and the changes for which it is petitioning for exogenous recovery are associated with increases in the price of natural gas, the Department's conclusion in D.T.E. 05-66 that the exogenous changes are not included in the GDP-PI also apply to Bay State in this proceeding.

2 satisfied with respect to Bay State's proposed recovery of lost revenue? 3 A. Yes. Like Boston Gas, Bay State is subject to a PBR plan and cannot file a rate 4 case to recover the proposed revenue declines. The revenue changes are 5 associated with higher gas commodity prices, which is a cost pass through item. 6 Finally, the revenues in question are lower than those approved in the Company's 7 last case. In terms of the implications for the Company's financial condition, this 8 is functionally equivalent to the criterion established in D.T.E. 05-66 that the cost 9 change is significantly above the levels approved in the Company's last rate case. 10 Q. Bay State is proposing to recover changes in revenues rather than changes in 11 costs through the exogenous factor. Is the recovery of exogenous changes in 12 revenues consistent with the Department's conclusions in D.T.E. 05-66? 13 A. Yes. Although D.T.E. 05-66 directly addresses exogenous cost changes only, the 14 recovery of exogenous revenue declines is consistent with the "larger question" 15 that the Department said it was addressing in that proceeding. This larger issue 16 was a utility's ability to maintain its financial integrity and attract capital. The 17 Department said it would not be consistent with utilities' constitutionally 18 guaranteed rights to deny the recovery of costs that are necessary to incur service 19 but largely beyond company control, since doing so can undermine a company's 20 financial integrity and ability to attract capital necessary to continue providing 21 service. This rationale is equally applicable to the recovery of revenues. A \$3 22 million exogenous decline in revenues has an identical impact on a company's

Are the other criteria that the Department established in D.T.E. 05-66

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Q.

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earnings as a \$3 million increase in exogenous costs. The larger question that the Department said was at stake in D.T.E. 05-66 implies that exogenous changes in revenues should be treated in the same manner as exogenous changes in costs. Bay State's proposal to recover revenue losses due to the decline in its AUPC is therefore consistent with the Department's ruling in D.T.E. 05-66.

6 IV. CONCLUSION

A.

O. Please summarize your conclusions.

There has been a long-term trend of declining AUPC in the natural gas industry. Since 2002 this trend has accelerated, as consumption has fallen in response to the rapid increase in natural gas prices. The acceleration in declining AUPC has been particularly dramatic for gas distributors in the Northeast US. Both the longer-term trend, and the recent acceleration, of declining AUPC are exogenous events which are beyond the control of utility managers and reflect circumstances that uniquely affect the gas distribution industry. Indeed, I believe that exogenous declines in gas usage and revenue stemming from higher gas prices are less controllable and impact the gas distribution industry more uniquely than the increase in bad debt expense resulting from same. Since the Department allowed Boston Gas to recover higher bad debt expenses in D.T.E. 05-66 because of higher gas prices, the rationale advanced for exogenous recovery in that proceeding applies even more strongly to Bay State's current proposal. Bay State's filing also satisfies all the other criteria that the Department established in

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D.T.E. 05-66 for the recovery of exogenous events. Finally, the fact that Bay State is proposing to recover exogenous revenue declines rather than exogenous cost increases is irrelevant since a cost increase and revenue decrease of the same magnitude will have an identical impact on a company's earnings and financial integrity. For all these reasons, I believe that Bay State's proposal to recover revenues lost because of an exogenous decline in its gas usage is consistent with Department precedent and should be allowed.

- 8 Q. Does this conclude your testimony?
- 9 A. Yes.

Exhibit LRK - 1

Trends in Average Gas Use for Residential & Commerical Gas Customers by State¹

1997-2005		1997-2002		2002-2005			
	region	Non-Normalized	Normalized ²	Non-Normalized Normalized ²		Non-Normalized Normalized ²	
National Aggregate		-1.77%	-1.58%	-1.90%	-1.50%	-1.55%	-1.74%
North East Aggregate		-0.99%	-1.01%	-1.37%	-0.43%	-0.37%	-2.00%
Connecticut	NE	-1.53%	-1.33%	-1.68%	-0.35%	-1.26%	-2.97%
D.C.	NE	-0.59%	-0.98%	-1.95%	-1.32%	1.68%	-0.42%
Maine	NE	3.20%	3.70%	7.32%	8.31%	-3.67%	-3.98%
Maryland	NE	0.93%	0.53%	0.67%	1.30%	1.35% -0.75%	
Massachusetts ³	NE	-4.82%	-4.94%	-6.04%	-5.10%	-1.79%	-4.55%
New Hampshire	NE	-4.62 <i>%</i> 0.64%	1.02%	-0.81%	0.37%	3.05%	2.09%
New Jersey	NE	-1.82%	-1.79%	-3.40%	-2.46%	0.81%	-0.68%
New York	NE	-0.69%	-0.75%	-0.05%	0.87%	-1.77%	-3.44%
Pennsylvania	NE	-1.32%	-1.25%	-2.47%	-1.48%	0.59%	-0.87%
Rhode Island	NE NE	-1.32% -0.86%	-0.93%	-2.47% -1.69%	-1.46% -0.45%	0.53%	-0.67 <i>%</i> -1.73%
Vermont	NE	-3.05%	-0.93 <i>%</i> -2.51%	-4.88%	-3.76%	0.00%	-0.42%
Southeast Aggregate	INC	-3.05% - 0.55%	-2.31% - 0.87%	-4.00% -1.00%	-0.96%	0.00% 0.19%	-0.42 % - 0.74%
Delaware	SE	-0.46%	-0.81%	-1.14%	-0.16%	0.66%	-1.90%
Florida	SE	2.45%		4.59%		-1.12%	
	SE		0.85%		2.76%		-2.33%
Georgia North Carolina	SE	-1.00%	-1.46%	-1.68%	-2.12%	0.14%	-0.38%
South Carolina	SE	-0.66%	-0.52%	-1.98%	-1.09% -0.72%	1.53%	0.44%
		-0.84%	-0.90%	-1.24%		-0.17%	-1.20%
Virginia ³	SE	-2.06%	-1.52%	-3.28%	-2.26%	0.97%	0.34%
West Virginia	SE	-1.41%	-1.03%	-2.14%	-0.94%	-0.19%	-1.18%
North Central Aggregate	NO	-2.23%	-1.72%	-2.44%	-1.59%	-1.88%	-1.94%
Illinois	NC	-1.93%	-1.24%	-1.98%	-1.06%	-1.84%	-1.54%
Indiana	NC	-1.76%	-1.13%	-2.78%	-1.55%	-0.06%	-0.44%
lowa	NC	-3.09%	-2.44%	-3.34%	-2.47%	-2.67%	-2.40%
Kansas	NC	-2.68%	-2.17%	-0.96%	-0.61%	-5.55%	-4.75%
Michigan	NC	-2.28%	-1.95%	-2.70%	-1.89%	-1.60%	-2.04%
Minnesota	NC	-2.07%	-1.44%	-0.85%	-0.36%	-4.11%	-3.24%
Missouri	NC	-2.62%	-1.78%	-2.98%	-2.21%	-2.02%	-1.06%
Nebraska	NC	-4.02%	-3.39%	-4.16%	-3.84%	-3.79%	-2.64%
North Dakota	NC	-2.84%	-2.31%	-1.07%	-0.91%	-5.79%	-4.63%
Ohio	NC	-2.06%	-1.86%	-3.16%	-2.05%	-0.23%	-1.55%
South Dakota	NC	-2.54%	-1.77%	-2.87%	-2.34%	-2.00%	-0.83%
Wisconsin	NC	-2.60%	-2.15%	-2.31%	-1.58%	-3.08%	-3.10%
South Central Aggregate		-1.94%	-1.28%	-1.86%	-1.37%	-2.08%	-1.14%
Alabama	SC	-2.28%	-1.71%	-2.95%	-2.26%	-1.16%	-0.79%
Arkansas	SC	-1.48%	-0.82%	-0.32%	-0.39%	-3.40%	-1.53%
Kentucky	SC	-2.47%	-1.91%	-3.10%	-1.97%	-1.43%	-1.80%
Louisiana	SC	-1.70%	-0.57%	-0.94%	-0.56%	-2.97%	-0.57%
Mississippi ³	SC	-1.86%	-1.20%	-1.44%	-1.01%	-2.91%	-1.68%
Oklahoma	SC	-1.93%	-1.32%	-1.54%	-1.74%	-2.59%	-0.62%
Tennessee	SC	-2.14%	-1.58%	-2.33%	-1.46%	-1.83%	-1.77%
Texas ³	SC	-3.33%	-1.78%	-1.92%	-1.03%	-6.84%	-3.67%
Northwest Aggregate		-2.19%	-2.15%	-1.53%	-1.93%	-3.29%	-2.53%
Idaho	NW	-1.60%	-1.78%	-0.26%	-0.66%	-3.84%	-3.64%
Montana	NW	-2.48%	-2.41%	-0.97%	-1.48%	-4.99%	-3.95%
Oregon	NW	-1.73%	-1.86%	-1.26%	-1.54%	-2.51%	-2.40%
Washington	NW	-2.23%	-2.11%	-1.95%	-2.42%	-2.70%	-1.60%
Wyoming	NW	-2.86%	-2.48%	-1.64%	-1.91%	-4.90%	-3.42%
Southwest Aggregate		-1.65%	-1.92%	-1.41%	-2.61%	-2.04%	-0.76%
Arizona	SW	-2.92%	-2.05%	-2.89%	-2.28%	-2.99%	-1.66%
California	SW	-1.11%	-1.87%	-0.94%	-2.98%	-1.39%	-0.02%
Colorado	SW	-3.07%	-2.30%	-2.23%	-1.79%	-4.48%	-3.16%
Nevada	SW	-2.19%	-1.60%	-3.13%	-2.25%	-0.63%	-0.50%
New Mexico	SW	-3.35%	-2.72%	-3.33%	-2.89%	-3.39%	-2.42%
Utah	SW	-2.59%	-2.63%	-2.24%	-3.13%	-3.19%	-1.80%

¹ Source of volume data: Energy Information Administration Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"

² Data are normalized using the estimated regression equation grevn = -0.011+0.607*ghdd where grevn is the annual change in residential and commercial gas volumes by state and ghdd is the annual change in heating degree days by state. The t-statistics on the regression coefficients are -4.718 and 22.981, respectively. Heating degree days data for this equation is from NOAA (National Oceanic and Atmospheric Administration) Historical Climatology Series 5-1.

³ Data is missing for 2005; period ends in 2004

Section 3

I. INTRODUCTION

1

- 2 Q. Please state your name, affiliation and business address.
- 3 A. My name is Daniel P. Yardley. I am Principal, Yardley & Associates and my
- 4 business address is 3 Apollo Circle, Lexington, MA 02421.

5 Q. On whose behalf are you testifying?

- 6 A. I am testifying on behalf of Bay State Gas Company ("Bay State" or the
- 7 "Company"). Bay State is a local distribution company ("LDC") serving nearly
- 8 300,000 natural gas customers in Massachusetts in the areas in and around
- 9 Springfield, Brockton and Lawrence.

10 Q. Please summarize your professional and educational background.

- 11 A. I have been employed as a consultant to the natural gas industry for over fifteen
- 12 years. During this period, I have directed or participated in numerous consulting
- assignments. A number of these assignments involved the development of gas
- distribution company cost allocation, pricing, decoupling, service unbundling and
- other tariff analyses. In addition to this work, I have performed interstate pipeline
- 16 cost of service, rate design and service unbundling analyses, gas supply planning
- analyses, and financial evaluation analyses. I received a Bachelor of Science
- Degree in Electrical Engineering from the Massachusetts Institute of Technology
- in 1988.

O. Have you previously testified before the Department of Telecommunica

2 and Energy?

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3 A. Yes. I testified before the Department of Telecommunications and Energy (the 4 "Department") on behalf of Bay State in D.T.E. 98-32 on transition cost issues 5 and in D.T.E. 00-99 on capacity planning issues. I have also testified or sponsored pre-filed testimony in proceedings before the New Hampshire Public 6 7 Utilities Commission, the New Jersey Board of Public Utilities, the Rhode Island 8 Public Utilities Commission, the Wisconsin Public Service Commission and the 9 Federal Energy Regulatory Commission on matters pertaining to cost of service, 10 cost allocation, rate design and upstream capacity planning.

11 Q. What is the purpose of your testimony in this proceeding?

12 A. The purpose of my testimony is to analyze changes in Bay State's average use per
13 customer ("AUPC") since the test year in its most recent base rate case. In
14 addition, my testimony calculates an appropriate exogenous adjustment pursuant
15 to the Company's performance-based regulation ("PBR") plan to address the
16 financial impact of the lost revenue due to a material decline in AUPC that has
17 occurred over this time period.

18 Q. Please summarize your findings.

19 A. The three principal findings and recommendations supported by my testimony are 20 as follows:

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2 3 4 5 6 7 8 9		establishment of its rates in D.T.E. 05-27: The cast-off rates for Bay State's PBR plan were derived from a calendar year 2004 test year. Weather-normalized AUPC for the Company's residential customer classes declined by 7.0 percent from 2004 through the twelve month period ending June 2006. Commercial AUPC declined by 5.5 percent over the same time period. (2) Bay State's AUPC decline translates into material earnings erosion due to the recovery of substantial fixed costs through
10 11 12 13 14 15 16		variable charges: Bay State's rate design is similar to most LDCs and employs variable charges to recover the majority of its fixed costs. As a result, the decline in AUPC represents a negative impact on earnings of \$7.1 million for the twelve month period ending June 2006. The earnings impact of the decline in AUPC is not reflected in the inflationary adjustment to the Company's rates under the price cap formula of Bay State's PBR plan.
17 18 19 20 21 22 23 24		(3) The cost impact attributable to the materially declining AUPC qualifies as an exogenous cost pursuant to Bay State's PBR plan: The impact of the decline in AUPC is attributable to changes in customer behavior that are beyond the ability of the Company to control and are appropriately reflected in the exogenous factor under the PBR plan. As described in detail by Lawrence Kaufmann, exogenous cost recovery of the decline in AUPC is consistent with Department precedent.
25 26 27	III.	EXOGENOUS ADJUSTMENT DUE TO MATERIAL DECLINE IN AUPC
28	Q.	How does the Department determine initial prices under a PBR plan?
29	A.	The Department employs a test year approach in a base rate proceeding to
30		establishing reasonable rates, both for traditional cost-of-service ratemaking and
31		to establish cast-off rates under a PBR plan. The Department's approach is
32		premised on the view that the historical revenue and cost data as adjusted for

1 known and measurable changes provide a proxy for future operating results. In 2 D.T.E. 05-27, the Department utilized 2004 as the test year to establish the initial 3 rates under Bay State's PBR plan. Therefore, the historical calendar year 2004 4 firm throughput, adjusted for the impact of actual versus normal weather, formed 5 the basis for establishing prices intended to recover the revenue requirement 6 approved by the Department in D.T.E. 05-27. 7 Q. Please discuss your findings regarding the use-per-customer data of Bay 8 State's customers. 9 A. I analyzed weather-normalized consumption data for Bay State's firm customers 10 to evaluate the impact of changes in AUPC since calendar year 2004, the test year 11 used to establish the cast-off rates for the Company's PBR plan. Use-per-12 customer data appropriately measure changes in consumption for typical 13 customers. During the first year following the test year, AUPC fell dramatically 14 as indicated in Exhibit DPY-1. Bay State's residential AUPC for 2005 declined 15 by 57 therms or 5.8 percent. The decline in AUPC for commercial customers for 16 the same time period was 332 therms or 4.0 percent. 17 Experience during the first six months of 2006 indicates that the material decline 18 in AUPC experienced in 2005 was not a single-year phenomenon because AUPC 19 declined an additional 1.2 percent for residential customers through June 2006. 20

Similarly, AUPC declined an additional 1.5 percent for commercial customers.

Bay State has experienced only limited customer growth since the 2004 test year. Therefore, the AUPC data presented in Exhibit DPY-1 are not influenced to any significant degree by the consumption characteristics of customers that have been added since the time that the cast-off rates were established in D.T.E. 05-27. In addition, since the AUPC is evaluated separately for heating and non-heating groups and by class, the changes in AUPC demonstrated in Exhibit DPY-1 are indicative of declining use for homogenous customer groupings. Moreover, the change in AUPC since the test year represents a departure from historical trends in AUPC. Bay State's AUPC has declined at a greater rate since the test year than during the years leading up to it. Q. In your view, does the decline in AUPC represent a material business risk for the Company? A. Yes. The level of Bay State's firm throughput directly affects firm base revenues and therefore company earnings. This occurs because the decline in AUPC is not reflected in the Company's PBR plan price adjustments. Moreover, the change in AUPC is the result of customer behavior, which is necessarily beyond the ability of the Company to control. Bay State does not have the ability to increase the volume of throughput passing through its customers' meters in order to mitigate the negative impact that the material decline in AUPC has had upon earnings

since the test year. Recognizing that the decline in AUPC is attributable to

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factors beyond the Company's control and has the potential to directly contribute to earnings erosion, one must conclude that the change in AUPC since the test year is a material operating risk facing Bay State.

Q. Have you quantified the financial impact of the decline in AUPC?

A.

I quantified the impact of the decline in AUPC that Bay State experienced since the test year by applying the existing base rates applicable to distribution service to the quantity of lost firm throughput represented by the change in AUPC. Comparing the 2005 weather-normalized throughput to the test year results in a loss of \$3.8 million due to the decline in AUPC of residential customers and \$1.8 million due to the decline in AUPC of commercial customers. A similar analysis for the annual period ending June 2006, which is the period used to calculate the index price change for rates effective November 1, 2006, yields losses of \$5.0 million and \$2.1 million due to the decline in AUPC of residential and commercial customers, respectively. The combined impact is more than ten times the exogenous threshold of \$600,000 applicable to the Company's PBR plan, which is a measure of the material nature of the associated cost.

In approving a 10-year PBR plan that is twice as long as the 5-year plan proposed by Bay State, the Department stressed the ability of Bay State to mitigate the additional market and business risks through filing for exogenous cost treatment. The financial impact of the materially declining AUPC is just such an exogenous

2 behavior, which are outside of the Company's control and which are not reflected 3 in the price cap adjustment formula. Q. 4 Please explain how a material decline in AUPC translates into earnings 5 erosion for Bay State. 6 A. The earnings impact is the result of employing traditional gas distribution rate 7 design to establish rates. There is a significant mismatch between the Company's 8 rate structure and its cost structure that leads to the business risk and earnings 9 erosion attributable to the material decline in AUPC. The majority of the 10 Company's operating costs are fixed while the majority of revenues are variable. 11 The cost structures for gas distribution companies such as Bay State are largely 12 fixed in nature, i.e., costs do not vary with the level of throughput. For example, 13 Bay State's costs to install a service and meter to connect a particular customer 14 and to send the customer a monthly bill are the same regardless of whether the 15 customer consumes 10 therms, 100 therms or 1,000 therms per month. Yet, only 16 a small portion of these fixed costs are recovered from customers through fixed 17 charges. In particular, approximately one third of base revenues for the twelve 18 months ended June 2006 are from fixed charges. The remaining two-thirds of 19 base revenues are recovered through variable charges, which are at risk to the 20 extent AUPC varies from the test year.

The material decline in AUPC is attributable to changes in customer

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1	Q.	Would it be reasonable to characterize the declining AUPC as normal "ebb
2		and flow" of customer consumption?

3 A. No. In some instances, the Department characterizes changes in a utility's sales 4 or customers as "ebb and flow", meaning that they are the part of the normal 5 course of business or that they do not represent a known and measurable change. Bay State's change in AUPC is known and measurable and is also significant as 6 7 represented by the fact that the resulting impact is an order of magnitude greater 8 than the threshold for exogenous adjustments to the PBR price-indexing 9 mechanism. Further, there is no offsetting impact to the Company associated 10 with a decline in AUPC, such as a decline in operating costs.

Q. What is the traditional remedy for gas utility earnings erosion?

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A. The typical remedy would be to file a base rate case so that future prices can reflect the lowered AUPC in the test year data relied upon to set prices. In addition, Bay State could request a modification, in the context of a base rate case, to recover a greater proportion of fixed costs through fixed rates. However, Bay State is precluded from pursuing this alternative because it is operating under a PBR plan, which continues until October 31, 2015.

- Q. Is the materially declining AUPC experienced by Bay State an isolated phenomenon or one that is being experienced by other LDCs?
- 3 A. LDCs across the United States are grappling with the challenges brought about by 4 materially declining AUPC. The American Gas Association ("AGA") studied 5 trends in residential consumption over the period 1980 through 2001 and found that consumption declined by approximately 1% per year over this period 6 7 primarily due to increased appliance efficiency and more energy efficient housing 8 characteristics. The Northeast region resisted this trend somewhat over this 9 period, primarily because appliance saturation for existing customers continued to 10 increase as customers added heating burner-tips at proportionately higher levels 11 than in other regions. Natural gas markets during the period were generally 12 characterized by ample supplies and stable prices. As prices and price volatility have increased in recent years due to tightening of the supply and demand 13 14 balance, customer behavior has resulted in substantial decreases in AUPC.
 - Q. Please describe the methodology for reflecting Bay State's declining AUPC as an exogenous adjustment for the annual period beginning November 1, 2006 under its PBR plan.

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A. The exogenous factor adjustment should be made on the basis of the lost revenues attributable to the change in residential AUPC for the period corresponding to the GDP-PI inflation measure used to set the PBR price adjustment to the test year.

1 The impact of the adjustment is to offset Bay State's lost base revenues due to the 2 decline in consumption from the test year for the annual period beginning 3 November 1, 2006. 4 I am not proposing to include the impact of declining AUPC for the commercial 5 classes in the exogenous or Z-factor at this time even though it would be 6 reasonable to do so. By excluding the change in commercial AUPC from the Z-7 factor, the Company remains responsible for the associated financial impact. 8 Since the impact of the exogenous event is recovered on an equal percentage 9 basis from all customers in accordance with Bay State's tariff, excluding the 10 commercial AUPC lost revenue impact lowers the Z-factor applicable to all 11 customers. 12 Q. Would an exogenous adjustment associated with declining AUPC create a 13 disincentive for Bay State to add new customers to its system? 14 A. No. Since the exogenous adjustment is calculated on the basis of changes in use 15 per customer, Bay State's incentive to add new customers is unchanged by the 16 proposal.

1	Q.	Please describe your calculation of the Z-factor attributable to Bay State's
2		material decline in residential AUPC for the November 1, 2006 price index
3		adjustment.
4	A.	Exhibit DPY-2 sets forth the calculation of the Z-factor for the November 1, 2006
5		price adjustment. The impact of the declining AUPC is calculated by first
6		quantifying the firm throughput impact of the change in residential AUPC. The
7		firm throughput impact of the change in AUPC is calculated separately for each
8		of Bay State's four residential classes by computing the difference between the
9		AUPC for the recent period to the corresponding month of the test year and
10		multiplying the result by the actual number of customers for the recent period.
11		The firm throughput impact is multiplied by the corresponding base rate for each
12		class to determine the cost impact to Bay State of the exogenous event. Bay
13		State's residential rate design reflects flat and non-seasonal rates that are distinct
14		for each of the Company's residential tariff rate schedules. The aggregate cost
15		impact is \$5.0 million.
16	Q.	Has the Department previously approved exogenous recovery of lost base
17		revenues from Bay State's customers?
18	A.	Yes. Bay State petitioned the Department to recognize lost base revenues
19		("LBR") connected with a change in the LBR recovery mechanism associated
20		with its demand-side-management programs through an exogenous adjustment

1 under its price freeze in D.T.E. 04-93, as well as similar requests in D.T.E. 04-57 2 and D.T.E. 03-36. The Department approved the Company's requests to recover 3 the financial impact of the lost revenues associated with DSM programs through 4 the Local Distribution Adjustment Clause ("LDAC"). In doing so, the 5 Department recognized that lost revenue may be equivalent to an exogenous cost. 6 Q. Is Bay State's separate 2006-07 Peak Period LDAC filing to recover LBR 7 associated with demand-side management programs duplicative of the Z-8 factor adjustment you calculated? 9 A. No. The most recent LBR that Bay State is filing to recover from customers 10 through the LBR component of the Local Distribution Adjustment Factor are 11 related to consumption reductions for the historical period through August 2006. The Z-Factor adjustment is intended to compensate for the reduction in residential 12 13 AUPC for the annual period beginning November 1, 2006, which is distinct from 14 the historic time period reflected in the 2006-07 Peak Period LDAC filing. If the 15 Department approves the proposed exogenous adjustment effective November 1, 16 2006, it would not be appropriate to recover any LBR through the LDAC 17 associated with consumption during the annual period beginning November 1, 18 2006.

1	Q.	Does your proposal insulate the Company from the positive and negative
2		impacts of weather?
3	A.	No. The change in AUPC was calculated by comparing weather-normalized
4		actual AUPC for the recent period to corresponding weather-normalized 2004 test
5		year data. Therefore, the impact of warmer-than-normal or colder-than-normal
6		weather is not reflected in the calculation of declining AUPC and is excluded
7		from the exogenous adjustment.
8	Q.	Why is it important for the Department to recognize the impact of your
9		proposal on Bay State's financial condition?
10	A.	A financially stable utility benefits its customers in many respects including the
11		ability to access capital needed to provide for service reliability and growth at
12		reasonable costs. Further, financial stability is an element of the regulatory
13		compact that affords Bay State a reasonable opportunity to recover its costs of
14		fulfilling its obligation to serve customers under the purview of the Department.
15		Mitigating the risk of materially declining AUPC through an exogenous
16		adjustment is particularly important under the 10-year term approved by the
17		Department for Bay State's PBR plan.

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1	0.	Will the Department	be able to	review the a	ppropriateness of a	nv exogenous

- 2 adjustment for declining AUPC in future years?
- 3 A. Yes. The Company's request to include an exogenous adjustment due to
- 4 declining AUPC is only for the one year period beginning November 1, 2006.
- 5 The Department will have the ability to review the appropriateness of any future
- 6 AUPC adjustments in future annual PBR filings.
- 7 Q. Does this conclude your prepared direct testimony?
- 8 A. Yes, it does.

Residential and Commercial Use per Customer

		Residential AUPC			Residential AUPC	Difference		
Year	<u>Month</u>	Therms	<u>Year</u>	<u>Month</u>	Therms	AUPC	Percent	
2005	1	159.2	2004	1	176.7	(17.5)	(9.9%)	
	2	170.8		2	175.1	(4.3)	(2.4%)	
	3	132.7		3	145.9	(13.2)	(9.1%)	
	4	100.4		4	107.5	(7.1)	(6.6%)	
	5	50.4		5	49.3	1.1	2.3%	
	6	33.3		6	30.9	2.4	7.9%	
	7	22.6		7	23.6	(1.0)	(4.4%)	
	8	20.0		8	21.2	(1.2)	(5.9%)	
	9	20.5		9	22.5	(2.0)	(8.7%)	
	10	29.5		10	33.8	(4.3)	(12.6%)	
	11	68.0		11	71.0	(3.1)	(4.3%)	
	12	<u>117.2</u>		12	<u>124.0</u>	<u>(6.8)</u>	<u>(5.5%)</u>	
Ann	ual Total	924.6			981.5	(57.0)	(5.8%)	

		Residential		Residential						
		AUPC			AUPC	Diffe	rence			
<u>Year</u>	Month	<u>Therms</u>	<u>Year</u>	<u>Month</u>	<u>Therms</u>	AUPC	<u>Percent</u>			
2005	7	22.6	2004	7	23.6	(1.0)	(4.4%)			
	8	20.0		8	21.2	(1.2)	(5.9%)			
	9	20.5		9	22.5	(2.0)	(8.7%)			
	10	29.5		10	33.8	(4.3)	(12.6%)			
	11	68.0		11	71.0	(3.1)	(4.3%)			
	12	117.2		12	124.0	(6.8)	(5.5%)			
2006	1	170.6	2004	1	176.7	(6.1)	(3.4%)			
	2	152.0		2	175.1	(23.1)	(13.2%)			
	3	142.1		3	145.9	(3.8)	(2.6%)			
	4	90.4		4	107.5	(17.1)	(15.9%)			
	5	48.5		5	49.3	(8.0)	(1.7%)			
	6	<u>31.3</u>		6	<u>30.9</u>	<u>0.5</u>	<u>1.5%</u>			
Ann	ual Total	912.7			981.5	(68.8)	(7.0%)			

Residential and Commercial Use per Customer

		Commercial AUPC			Commercial AUPC	Difference		
Voor	Month		Voor	Month				
<u>Year</u>	<u>Month</u>	<u>Therms</u>	<u>Year</u>	<u>Month</u>	<u>Therms</u>	AUPC	<u>Percent</u>	
2005	1	1,240.8	2004	1	1,350.0	(109.2)	(8.1%)	
	2	1,349.7		2	1,420.7	(70.9)	(5.0%)	
	3	1,147.0		3	1,197.1	(50.2)	(4.2%)	
	4	879.1		4	919.5	(40.5)	(4.4%)	
	5	497.9		5	513.3	(15.5)	(3.0%)	
	6	356.6		6	327.3	29.3	8.9%	
	7	266.5		7	257.3	9.2	3.6%	
	8	243.6		8	254.6	(11.0)	(4.3%)	
	9	252.1		9	265.1	(13.0)	(4.9%)	
	10	318.3		10	335.8	(17.5)	(5.2%)	
	11	581.4		11	589.7	(8.3)	(1.4%)	
	12	<u>933.6</u>		12	<u>968.4</u>	<u>(34.8)</u>	<u>(3.6%)</u>	
Ann	ual Total	8,066.5			8,398.8	(332.3)	(4.0%)	

		Commercial			Commercial				
		AUPC			AUPC	Diffe	Difference		
<u>Year</u>	Month	<u>Therms</u>	<u>Year</u>	<u>Month</u>	<u>Therms</u>	<u>AUPC</u>	<u>Percent</u>		
2005	7	266.5	2004	7	257.3	9.2	3.6%		
	8	243.6		8	254.6	(11.0)	(4.3%)		
	9	252.1		9	265.1	(13.0)	(4.9%)		
	10	318.3		10	335.8	(17.5)	(5.2%)		
	11	581.4		11	589.7	(8.3)	(1.4%)		
	12	933.6		12	968.4	(34.8)	(3.6%)		
2006	1	1,324.3	2004	1	1,350.0	(25.7)	(1.9%)		
	2	1,233.2		2	1,420.7	(187.4)	(13.2%)		
	3	1,153.9		3	1,197.1	(43.2)	(3.6%)		
	4	8.808		4	919.5	(110.8)	(12.0%)		
	5	478.8		5	513.3	(34.5)	(6.7%)		
	6	<u>340.4</u>		6	<u>327.3</u>	<u>13.0</u>	4.0%		
Ann	ual Total	7,934.9			8,398.8	(464.0)	(5.5%)		

Calculation of Exogenous Adjustment Declining Use per Customer

R3 - Residential Heating

710 710	oraerriar :	rodung								Dif	ference
<u>Year</u>	<u>Month</u>	<u>Customers</u>	<u>Therms</u>	<u>AUPC</u>	<u>Year</u>	<u>Month</u>	<u>Customers</u>	<u>Therms</u>	<u>AUPC</u>	AUPC	<u>Therms</u>
2005	7	203,066	4,911,200	24.2	2004	7	199,940	5,074,580	25.4	(1.2)	(242,719)
	8	203,170	4,342,540	21.4		8	200,149	4,550,420	22.7	(1.4)	(276,563)
	9	203,849	4,470,340	21.9		9	200,793	4,846,920	24.1	(2.2)	(450,348)
	10	203,826	6,520,350	32.0		10	202,324	7,493,140	37.0	(5.0)	(1,028,417)
	11	204,423	15,451,060	75.6		11	204,257	16,283,480	79.7	(4.1)	(845,654)
	12	205,646	27,040,720	131.5		12	205,306	28,806,910	140.3	(8.8)	(1,813,896)
2006	1	204,954	39,357,110	192.0	2004	1	204,987	40,973,110	199.9	(7.9)	(1,609,404)
	2	205,122	35,097,840	171.1		2	204,671	40,529,080	198.0	(26.9)	(5,520,547)
	3	208,855	33,354,020	159.7		3	203,638	33,586,670	164.9	(5.2)	(1,093,107)
	4	207,181	20,930,260	101.0		4	204,950	24,742,430	120.7	(19.7)	(4,081,506)
	5	206,312	11,011,650	53.4		5	200,199	11,053,650	55.2	(1.8)	(379,519)
	6	204,300	6,895,510	<u>33.8</u>		6	200,262	6,723,390	<u>33.6</u>	<u>0.2</u>	36,552
Ann	ual Total			1,017.5					1,101.7	(84.1)	(17,305,128)

Base Rate per Therm \$ 0.2714

R3 Revenue Difference \$ (4,696,612)

Calculation of Exogenous Adjustment Declining Use per Customer

R4 - Residential Heating - Low Income

										Dif	ference
<u>Year</u>	<u>Month</u>	<u>Customers</u>	<u>Therms</u>	<u>AUPC</u>	<u>Year</u>	<u>Month</u>	<u>Customers</u>	<u>Therms</u>	<u>AUPC</u>	AUPC	<u>Therms</u>
2005	7	16,009	546,270	34.1	2004	7	16,687	470,760	28.2	5.9	94,637
	8	15,603	350,990	22.5		8	16,205	382,420	23.6	(1.1)	(17,223)
	9	15,261	336,590	22.1		9	15,777	397,760	25.2	(3.2)	(48,161)
	10	16,961	469,860	27.7		10	15,619	565,450	36.2	(8.5)	(144,174)
	11	18,359	1,290,370	70.3		11	15,638	1,213,490	77.6	(7.3)	(134,266)
	12	18,617	2,438,630	131.0		12	15,858	2,180,760	137.5	(6.5)	(121,542)
2006	1	19,969	3,614,960	181.0	2004	1	17,441	3,569,190	204.6	(23.6)	(471,569)
	2	20,286	3,650,600	180.0		2	18,053	3,761,130	208.3	(28.4)	(575,749)
	3	16,532	3,655,850	221.1		3	19,028	3,871,100	203.4	17.7	292,542
	4	17,614	2,331,810	132.4		4	16,651	2,800,880	168.2	(35.8)	(631,057)
	5	18,020	1,762,150	97.8		5	17,255	1,842,390	106.8	(9.0)	(161,922)
	6	18,866	923,030	<u>48.9</u>		6	17,002	696,820	<u>41.0</u>	<u>7.9</u>	149,815
Ann	ual Total			1,168.9					1,260.7	(91.9)	(1,768,671)

Base Rate per Therm \$ 0.1547 R4 Revenue Difference \$ (273,613)

Calculation of Exogenous Adjustment Declining Use per Customer

R1 - Residential Non-Heating

										Dif	ference
<u>Year</u>	Month	<u>Customers</u>	<u>Therms</u>	<u>AUPC</u>	<u>Year</u>	Month	<u>Customers</u>	<u>Therms</u>	<u>AUPC</u>	AUPC	<u>Therms</u>
2005	7	31,003	377,930	12.2	2004	7	32,333	417,340	12.9	(0.7)	(22,243)
	8	30,965	334,220	10.8		8	32,264	381,400	11.8	(1.0)	(31,824)
	9	30,877	348,150	11.3		9	32,155	389,390	12.1	(8.0)	(25,764)
	10	30,153	387,240	12.8		10	32,085	426,210	13.3	(0.4)	(13,306)
	11	29,770	466,120	15.7		11	32,016	496,330	15.5	0.2	4,609
	12	29,662	531,670	17.9		12	31,699	581,630	18.3	(0.4)	(12,584)
2006	1	29,223	595,610	20.4	2004	1	30,418	620,670	20.4	(0.0)	(676)
	2	29,190	518,200	17.8		2	30,326	615,570	20.3	(2.5)	(74,311)
	3	29,791	566,660	19.0		3	30,244	542,900	18.0	1.1	31,892
	4	29,759	487,460	16.4		4	29,863	500,320	16.8	(0.4)	(11,118)
	5	29,961	446,980	14.9		5	32,878	440,280	13.4	1.5	45,762
	6	29,645	434,100	<u>14.6</u>		6	32,477	458,210	<u>14.1</u>	<u>0.5</u>	15,846
Ann	ual Total			183.8					186.9	(3.1)	(93,717)

Base Rate per Therm	\$ 0.2684
R1 Revenue Difference	\$ (25,154)

Calculation of Exogenous Adjustment Declining Use per Customer

R2 - Residential Non-Heating - Low Income

7.12										Dif	ference
<u>Year</u>	<u>Month</u>	<u>Customers</u>	<u>Therms</u>	<u>AUPC</u>	<u>Year</u>	Month	<u>Customers</u>	<u>Therms</u>	<u>AUPC</u>	AUPC	<u>Therms</u>
2005	7	1,391	25,680	18.5	2004	7	1,556	28,640	18.4	0.1	77
	8	1,373	18,710	13.6		8	1,514	24,700	16.3	(2.7)	(3,690)
	9	1,394	19,180	13.8		9	1,485	26,670	18.0	(4.2)	(5,856)
	10	2,080	21,930	10.5		10	1,471	24,710	16.8	(6.3)	(13,010)
	11	2,457	44,060	17.9		11	1,475	29,090	19.7	(1.8)	(4,397)
	12	2,438	59,210	24.3		12	1,633	45,170	27.7	(3.4)	(8,227)
2006	1	2,666	71,880	27.0	2004	1	1,132	34,020	30.1	(3.1)	(8,241)
	2	2,647	66,310	25.1		2	1,142	39,490	34.6	(9.5)	(25,222)
	3	1,928	70,310	36.5		3	1,207	51,300	42.5	(6.0)	(11,634)
	4	1,921	50,780	26.4		4	1,441	90,360	62.7	(36.3)	(69,679)
	5	1,679	43,270	25.8		5	1,599	54,620	34.2	(8.4)	(14,083)
	6	1,899	33,140	<u>17.5</u>		6	1,559	32,730	<u>21.0</u>	(3.5)	(6,728)
Ann	ual Total			256.7					341.9	(85.1)	(170,690)

Base Rate per Therm	\$ 0.1610
R2 Revenue Difference	\$ (27,481)

Total Revenue Difference

Total	\$ (5,022,860)
R4	 (273,613)
R3	(4,696,612)
R2	(27,481)
R1	\$ (25,154)